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MAY 12 1918

# DRUG & CHEMICAL MARKETS

ESTABLISHED IN SEPTEMBER 1914 AS "WEEKLY DRUG MARKETS" MAY 13 1918

D. O. HAYNES & Co. Publishers No. 3 PARK PLACE NEW YORK, U. S. A.

SUBSCRIPTION:—U. S., CUBA AND MEXICO, \$4.00; CANADA, \$4.50; FOREIGN, \$5.00 A YEAR IN ADVANCE

VOL IV

NEW YORK, MAY 8, 1918

No. 35

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Entered as second-class matter. Dec. 7, 1914 at the Post Office at New York, N. Y., under the Act of March 3, 1879.

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PUBLISHED EVERY WEDNESDAY

D. O. HAYNES & CO., Publishers, . New York  
Publication Office: No. 3 Park Place.  
Telephone, 7646 Barclay - Cable Address, "Era, New York."

CHICAGO OFFICE—123 W. Madison St.—Phone, Central 6941

### SUBSCRIPTION RATES

United States, Cuba and Mexico.....\$4.00 a year  
Canada \$4.50 and Foreign \$5.00 a year.  
Single Copies, 10 cents

### ALL SUBSCRIPTIONS PAYABLE IN ADVANCE

REMIT by P. O. or Express Order or New York Draft payable to order of D. O. Haynes & Co. Add 10 cents for collection charges if you send local check.

Published at No. 3 Park Place, Borough of Manhattan, New York, by D. O. Haynes & Co., a corporation; President and treasurer, D. O. Haynes; vice-president, E. J. Kennedy; secretary, D. O. Haynes, Jr. Address of Officers is No. 3 Park Place, New York.



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## Too Many Broken Contracts

The Supreme Court calendars are loaded with hundreds of cases based upon broken contracts to deliver chemicals which the defendants agreed to supply at a fixed price. In a majority of these suits the complaint alleges that the price advanced, and the dealer or broker failed to make delivery. The answer, when any attention whatever is paid to a suit, is usually a general denial. Owing to the crowded condition of the Supreme Court calendars a year often elapses before a case is tried and meantime the plaintiff must go into the open market and purchase the commodity he needs at the higher price.

Unless a contract is binding or the dealer is responsible it is a waste of time and money to make purchases under such conditions. It may take some time to thoroughly sift out the irresponsible brokers, but the trade can readily eliminate them if these court suits are investigated by a committee, or a bureau is formed for an exchange of credit information, as is the practice in almost all leading industries. Reports of salted dyestuffs and substitution of cheaper products in place of the goods ordered and of attempted bribery of employees to obtain trade, if furnished to such a bureau, would soon freeze out the frauds.

## Must Not Fix Resale Price

The ruling of the Federal Trade Commission that manufacturers must not fix the resale price of their products will open up anew the price-fixing issue which has formed the subject of heated debates in trade associations and in Congress for many years. While the order of the Federal Trade Board now controls the situation, especially in view of Justice Brandeis' opinion in the American Graphophone case recently delivered in the Supreme Court of the United States, it is probable that the question will finally be settled by act of Congress.

The division of sentiment among manufacturers regarding the question of price fixing is likely to result in the death of the Stevens bill and the continued enforcement of the present law which prohibits the practice of making agreements that goods shall be sold at retail on terms dictated by the maker. Manufacturers take into consideration the question of discounts and prompt payment when selling to large distributors and the fact is they frequently find the account of a large house has given them a net return much larger than a hundred small concerns and they are not inclined to question the price charged for the goods after

they have gone to the retailer. The decisions of the United States courts are in their favor for the ruling has been repeatedly made that when the goods have been sold in regular trade the new owner has the right to dispose of them at his discretion.

There is, however, a law against unfair competition and the Federal Trade Commission is testing this act by bringing suit against several houses which sold goods at about cost price. If these cases are decided in favor of the Government the law against unfair competition may control the price-cutting situation to such an extent that the competition will be practically eliminated. Department stores offer goods at slightly lower prices than are charged by the standard drug stores, but the manufacturer takes the business in nine cases out of ten because of the large orders, the security, and the fact that such houses discount their bills.

Any article widely advertised and in popular demand is sure to be cut by these stores. As a general proposition it is safe to say that ethical pharmaceuticals, preparations put up for physicians and not generally known to the public and never advertised except to the profession, escape the price-cutter. There are also many articles of general use which "get by" the cut-rate stores and obtain a very large sale at fixed prices in standard-price drug stores. On these the retail druggist need not fear competition. The lesson which is taught by the bitter contest over price-fixing is that united action is necessary to win any fight, whether in actual war or in trade conflicts. Manufacturers like big business and they also like the steady, reliable trade of the standard-price druggist.

### A Future Fraught with Possibilities

So immediate was the response of the market to the news of an embargo on Java cinchona bark and quinine that the subsequent changing of this announcement to the placing of these staples under an export license system similar to that which our own Government has adopted has not yet had great effect upon prices. First hand dealers are keeping their scanty stocks of crude bark under lock and key. Manufacturers are still refusing to consider any save government orders. The high quotations of jobbers are still nominal. Apparently no branch of the trade views the quinine situation as encouraging.

Speculation as to the cause of the export licenses centers about three motives. First, retaliation for our seizure of the Dutch ships, which is an obvious, but not very logical reason, since the bark is among the Javanese exports second only to sugar in commercial importance. Second, German efforts to hamper the Allies by stopping at its source a necessary war munition: a motive dependent upon the force of German influence in Holland and the size of the German stocks of quinine—two factors we cannot know. Third, a trade move on the part of Amsterdam interests to break up direct trading between the East Indian planters and drug manufacturers in Japan,

this country, and elsewhere, and to control the world's quinine situation, if not through the Amsterdam bark auctions, at least through the Bandoeng quinine factory. This factory, it will be remembered, was started about 1890 as a threat to buyers of Java bark in the Amsterdam market that unless they paid a price that would enable the planters to survive, the Dutch Government would enter the field as a maker of quinine salts. It helped serve this purpose twenty-five years ago, and the threat is even more serious today when the factory is well organized and in a position to expand its operations further. Last year it paid a dividend of 93 per cent. and did a gross business of over a million and a half dollars in sales.

The situation has revived rumors of American cinchona plantations in South America, and even if none of our capital is so invested, it will, if continued long, stimulate the artificial cultivation of cinchona in its original habitat. The natural cinchona supply of the Andes is not only very limited but the wild bark is very low in alkaloidal content. Lack of trained, scientific supervision for South American plantations and the unreliability of South American labor will be serious handicaps to overcome. Under the most favorable circumstances it will be three years before any appreciable supplies can be counted upon from that source.

The Government's purchases of citric acid draw attention to the limited production of this product in the United States. There has been very little increase in the output in the last few years. The production was 3,417,795 pounds in 1915; 4,182,478 in 1916; and 4,032,897 in 1917. The price, meantime, has been steadily going up. Citrate of lime is on the list of restricted imports and the signs are favorable for California fruit growers to invest in more plants for using up their lemon culls with a good chance of making money while at the same time they will be helping the Government.

The loss of more than 6,000,000 workdays in the first six months of the war by labor strikes means a heavy loss in production in the United States at a time when the output of war material has a direct bearing on our chance of victory. The loss to the working men is appalling, too, when the increasing cost of living is considered. These men who went on strike threw away more than \$24,000,000 which they can never recover because that lost time is gone forever.

### ELECTION AT THE CHEMISTS CLUB

The Chemists Club held its annual meeting on May 1 at the clubhouse, 50 East 41st Street, when Ellwood Hendrick was elected president; Charles H. Herty, vice president; Charles L. Parsons, non-resident vice president; J. R. M. Klotz, Secretary; and H. M. Toch, treasurer. The trustees are K. G. Mackenzie and T. R. Duggan. The club invested \$15,000 in the Third Liberty Loan. It was announced that the club had added 400 members during the year. Dr. M. C. Whitaker, retiring president, received a silver tea and coffee service.

# Industries Concentrating on War Work

## Government to Use Full Capacity of Steel and Woolen Mills

By THE NATIONAL CITY BANK OF NEW YORK

THE situation in France has stimulated the activities of this country. Vessels have been pressed into service and it is no secret that troops are going forward rapidly. As fast as they leave the training camps more men are called to the colors, more cantonments will be built, and men will go across as fast as transportation can be provided. The shipping situation is looking better. The yards are well manned, conditions are more settled, proficiency is rapidly improving as the workmen gain experience, and now that Charles M. Schwab has been drafted to head the work, confidence is felt that the period of divided authority and confusion is over, and that really great achievements are to come. After a few more months, when the launchings from the big new yards begin, ships will come forward in a constantly increasing stream.

The entire industrial situation is coming into more satisfactory shape, as war work assumes its proper proportions, and production for ordinary consumption shrinks correspondingly. The country is being rapidly organized to the one great purpose which is now supreme. Less than a year ago people were arguing that the war requirements could be met by speeding up and enlarging the capacity of the industries, allowing other consumption to go on as usual.

It was even said that five or ten per cent. of the capacity of the steel works, and about the same share of the capacity of the textile mills, would take care of the war requirements, but today it is realized that the government can use practically the entire capacity of the steel industry, all of the woollen mills, and a very large percentage of the cotton goods capacity, and all of the man-power that can be possibly had. Not one day's work can the country afford to spare to unnecessary things while the line wavers in France. Non-essential industries, and relatively unimportant ones, are being converted to important work.

Through the reorganized War Industries Board the guiding hand of the Government is reaching into every locality and every business and co-ordinating all agencies to the task in hand. This is as it should be and must be, for the result of the war will depend upon superiority in industrial concentration.

### Curtailment in Germany

Germany is ruthlessly shutting down small works and concentrating machinery and labor where it can be used to the best advantage. Recent figures show that of 1,700 weaving and spinning mills only 70 are still working at high pressure, in the boot and shoe industry 300 factories are all that remain out of 1,400, and in the oil industry 15 establishments out of 720. Of course, these reductions are not wholly due to concentration; a shortage of raw materials is largely responsible.

Between now and the opening of another winter it is expected that the facilities and methods of transportation will be very much improved. The co-ordination of the railways will be worked out, terminal conditions will be bettered, cars will be built, and the water lines will be brought into use. The new Erie Canal is now open in practically its entire length, and has been taken over by the Federal authorities for use in con-

junction with the rail lines, barges will be constructed, and lake and river lines established in the Middle West. All this is work which will not show immediately on the battle front in France, but ultimately the effects will tell there. Moreover, permanent benefits will surely result.

### The Country United

The best of all signs are those which tell of growing unity and resolution of purpose among the people. The gravity of the conflict, the cost in young life each day, the importance of putting our full powers into it, are coming home to the people. They are seeing that it is not to be settled by merely pacific speeches or conventions. It must be fought out to either victory or defeat—to supremacy for the ideas which America represents, or supremacy for the German military power. When this is fully accepted, as it is rapidly coming to be, the real power of this country will come into action.

Labor conditions are better. There is a spirit of emulation and enthusiasm in the shipyards which is prophetic, and patriotism is a dominant note. A national industrial board of mediation and conciliation, composed of six employers, six representatives of labor and two representatives of the public has been created in Washington, and has agreed upon certain principles which it will endeavor to have recognized as the basis of industrial peace during the war.

### Arbitration Plan

The most important condition is that all controversies shall be arbitrated without cessation of work. Lessons are likely to be learned from this experience that will be of lasting value in the promotion of industrial harmony. The heads of the labor organizations are agreed to the arrangement and there is no reason to doubt that they are sincerely and loyally supporting the Government, and alive to the issues of the war. Allowance must be made for some of the difficulties with which they are contending in dealing with great bodies of men, many of whom are not as well informed as themselves.

Bond subscriptions for the Third Liberty Loan among the wage-earners are more general than for any of the preceding loans. The causes of the war, the reasons why this country entered it, the vital interests of all classes in victory, are becoming daily more clearly understood, but there should be no relaxation of the efforts to make them known.

### Germany's World of Enemies

The relations between Holland and Germany are very much strained, and the attitude of Sweden toward Germany is one of alarm, owing to the arrival of German troops in Finland and on the Aland Islands. There is fear that Finland, with which the relations of Sweden are naturally intimate, and through which Sweden has access to Russia, may become a mere dependency of Germany. The Conservative party of Finland, represented by the White Guard, admits applying to Germany for aid against the Red Guard, which represents the Bolshevik element, but claims that it applied to Sweden in vain and had recourse to Germany because help for the maintenance of order could be had

nowhere else. The White Guard and its German allies, not content with fighting the Red Guard, are attempting to seize the Russian peninsula upon which is located the open port of Kola, which is connected with Petrograd by the newly constructed railway, but British and French troops have been landed there to defend the territory and probably to prevent stores at Kola from falling into German hands.

#### South America Aiding

The relations between Uruguay and Germany are at a critical stage, owing to a recent violation of neutral rights on the high seas by a German submarine. The attitude of the Argentine Government continues sympathetic to the United States and hostile to German policies, but so far the German Government by compliance with Argentine demands has averted a declaration of war. Brazil is fully into the war, has leased the German ships seized in its harbors to France, its navy is doing patrol duty, has passed a conscription law, and has in training an army which will probably be sent to France before long. A commission of army engineers is now in this country buying army equipment and supplies. All the other countries of South and Central America are sympathetic toward the course pursued by the United States.

Russia, although unable to help herself at present, is boiling with resentment for the indignities imposed upon the country by Germany, and the loss of territory will be a lasting grievance. There is continual friction with the German officials in the Ukraine and occupied provinces, and whenever Russia is in position to exert her national strength there will be another chapter added to the late peace negotiations.

#### CAMOUFLAGE IN GERMAN PATENTS

When the National Aniline and Chemical Company and E. I. du Pont de Nemours & Co., applied for licenses to manufacture dyes under German-owned patents it was found that in many instances insufficient descriptions were given to enable any one to follow the correct formulas. In some cases where attempts to combine the ingredients were made explosions or failure from other causes resulted. In other cases the formulas worked without a hitch when tried in a laboratory, but were a failure when an effort was made to produce the dyes in commercial quantities.

After the proper combinations for the mercantile production of dyes were established, further careful experimentation was necessary to discover which patented formula or formulas it was necessary to follow in order to introduce the dyes into fabrics. It was not until these problems were solved satisfactorily that the licenses were approved.

#### LICENSED TO MAKE PATENTED DRUGS

Additional licenses to American firms to manufacture drugs under enemy patents have been issued by the Federal Trade Commission to the Antoine Chiris Company, of New York, to manufacture "barbital" (veronal); to the Calco Chemical Company to manufacture "procaine" (novocain) and to the Diarsenol Chemical Company, of Buffalo, to manufacture "arsphenamine" (salvarsan). Announcement has already been made of former licenses to manufacture these drugs under enemy-owner patents.

Commercial failures in the drug and chemical industries during April numbered three with liabilities of \$38,900. In 1917 there were seven failures and in 1916 only three. These were all manufacturers. In the trade, including dealers and brokers, there were 39 failures in April with liabilities of \$318,234. In 1917 there were 30 and in 1916 the total was 56.

#### BROKEN CONTRACTS LEAD TO MANY SUITS

##### Hundreds of Cases in New York Courts Due to Failure to Deliver the Goods When the Price Goes Up Before Date of Execution

A prominent New York firm dealing in chemicals has hung upon the walls of its office a placard announcing in large type: "A contract is a contract." Customers often comment on the notice, but very few know why the firm was led to make the declaration so prominent a part of its mural decorations. Three suits now pending in the New York Supreme Court may account for the deep feeling the members of the firm have against dealers and brokers who fail to deliver according to contract when the price of the products goes up before the date of delivery. Other firms are having similar experiences. The complaint in one case is given as a sample of the hundreds of cases pending in New York at the present time based upon the failure of dealers and brokers to meet their contracts. The complaint in this case alleges:

"That on or about July 5, 1917, for good and valuable considerations, a contract in writing was duly made by and between plaintiff and defendants, wherein and whereby plaintiff agreed to purchase from defendants and defendants agreed to sell to plaintiff two (2) carloads of twenty-five (25) tons each of seventy-six per cent. (76 per cent.) solid caustic soda to be packed in drums, at the agreed price of six and 55/100 dollars, (\$6.55) per hundred pounds.

"That it was further agreed by and between plaintiff and defendant as a part of said contract that defendants should deliver said caustic soda to plaintiff free on board the cars at Barberton, Solvay or Wyandotte, during the month of August, 1917.

"That plaintiff was ready, willing and able at the places and times appointed for delivery to receive the amount of caustic soda required by the terms of said contract to be delivered to it and to pay for the same and has duly performed all the covenants and conditions of said contract on its part to be performed.

"That, at defendant's request, plaintiff continued to be ready, willing and able to receive said caustic soda and to pay for the same until September 24, 1917; that on said day plaintiff, after due notice to defendants, purchased in the open market fifty thousand six hundred and twenty-five (50,625) pounds of caustic soda, of the quality described in the contract, at the lowest price at which it could be obtained, namely nine and 50/100 dollars, (\$9.50) per hundred pounds, and on September 26, 1917, after due notice to defendants, plaintiff purchased in the open market forty-nine thousand three hundred and seventy-five pounds of said caustic soda at the lowest price it could be obtained, namely nine and 50/100 Dollars, (\$9.50) per hundred pounds.

"That on September 24, 25 and 26, 1917, the market price of caustic soda of the quality described in the contract, delivered free on board the cars at Barberton, Solvay or Wyandotte, was nine and 50/100 Dollars, (\$9.50) per hundred pounds.

"That defendants have at all times neglected and refused to deliver said fifty (50) tons of caustic soda or any part thereof to plaintiff, although plaintiff has duly demanded delivery of the same to the damage of plaintiff in the sum of two thousand nine hundred and fifty dollars, (\$2,950).

"Wherefore, plaintiff demands judgment against the defendants in the sum of two thousand nine hundred and fifty Dollars, (\$2,950), with interest from September, 1917."

The answer of the defendants is a general denial. The case will probably come to trial about January.

# Germany's Stolen Chemistry

## Important Scientific Discoveries and Industrial Processes of All Nations Appropriated by the Germans

By TOWNES R. LEIGH, Professor of Chemistry Georgetown College.

### PART III

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THE history of medicine overlaps that of Pharmacy, and if one were to follow the line of development which marks the great progress made in the art of preparing remedies, he will find many advances that can by no stretch of the imagination be credited to Germany. The process of percolation, the importance of which in pharmacy in the last century cannot be overestimated, was first applied to drugs and medicinal substances by Boullay brothers in Paris, in 1833, but it remained for American pharmacists to demonstrate its practical usefulness, the labors of Duhamel, Procter, Grahame, Squibb, and others leading to the adoption of the process in the United States Pharmacopoeia of 1840, the first official standard to recognize the use of the method. Subsequent editions of the U. S. P. down to the present time continued the method, confirmatory evidence of its value.

In the early dissemination of general pharmaceutical information, Germany, with all of her wealth of technical literature, is a late comer. Pharmaceutical journalism was born in America in 1829, long before the appearance of any other periodical for the exclusive use of pharmacists. This event was made possible by the druggists of Philadelphia, who early recognized that special educational training was necessary for those who would solve the vital questions pertaining to success in pharmacy, and as a result of their deliberations, in 1821, founded the Philadelphia College of Pharmacy, the first educational institution teaching pharmacy in the whole world.

One has but to look over the field of manufacturing pharmacy as it appears in France, England and the United States to become aware that the inventors who made labor saving devices responsible for much of the present day progress in the art of preparing medicines are not of the "made in Germany" type. It would be useless to assert that great progress has not been made in similar lines in Germany. With the establishment of historic facts, however, it will be found in most cases that the pioneer who first gave birth to the germinal idea was not a German, but a thinker and a toiler of another nationality. German scientists and statesmen have gloried in their great industrial development and have pointed to it as proof of superior national genius, but the student of history will find that this progress, great as it is, has been attained by the Hun in building in large part upon the discoveries and inventions of those outside of Germany, at a time when other nations were engaged in the greater problems of colonial development and the extension of the civilizing influences of humane government. Germany cannot lay claim to propagating the original ideas that have resulted in the greatest advances in pharmacy any more successfully than she can deny the influence of Perkin's discovery of mauve, which gave the first impetus to the aniline industry.

#### Medicine

In the realm of medical science the most important discoveries have not come from Germany. Clinical men, quinine, cinchona, strychnine, and brucine; and

instruction in hospitals began in Italy and from there was carried into Holland and afterwards highly developed in Leyden. It was John Bell of Scotland who pointed out the difference between the sensory and motor nerves. Harvey, an Englishman, discovered the circulation of the blood; and Rudbeck of Holland, lymphatics. Dr. Wells, an American, first demonstrated the use of anesthetics. Dr. Jenner, an Englishman, discovered the vaccine prevention of small-pox. Dr. Lister, also English, was the father of antiseptic surgery; Pasteur, the Frenchman, originated serum therapy; and Roux, also a Frenchman, discovered by chemical means the diphtheria toxin. The epoch-making discoveries on the phagocytic activities of the white blood corpuscles were made by Metchnikoff of Russia. The cathode rays is from Crookes, of England, and it was N. R. Finsen of Denmark, who suggested the use of the ultraviolet rays for treating certain diseases; and radio-activity was discovered by the Curies in France.

#### Not Discovered in Germany

Rubber combination plasters, including as they do the surgeon's adhesive plaster, so widely used, are distinctively American, and Germany has never equaled them. Absorbable sutures and countless other pharmaceuticals could never have been produced without antiseptics and sterilization for which we are indebted to Pasteur and Lister, above mentioned. It was Mothes of Paris who popularized gelatine capsules for use in nauseous medicines, and the Tilden Company, of New York State did a similar service for sugar-coated pills. Dr. Fuller, an American, introduced in 1878 another distinctive form of American medicine, called "tablet triturates," the magnitude of whose manufacture can be guessed when it is learned that one firm alone makes five hundred different varieties. Dover's powder is a gift of Thomas Dover, a Britisher, and Epsom salt as a medicine is also of British origin. Plaster of Paris, widely used in setting broken limbs, was first obtained and used at Montmartre, near Paris.

The process of injection was invented and brought into vogue by Dr. Alexander Wood of Edinburgh; collodion was first applied to purposes of surgery by Maynard of Boston. We have to thank Scheele of Sweden not only for tartaric acid now largely used in effervescent draughts, but lactic acid, citric acid, prussic acid, glycerine and a score of other important substances, among them chlorine, now used by hundreds of cities for the sterilization of their water supply and by laundries throughout the country for the whitening of the linen. To Frillat of France we are indebted for the commercial application of formalin, and to Dr. Barrow for its use as a specific for blood poisoning, or sepsis, by injection.

While chloroform was discovered by Guthrie of Scotland in 1831, it was Simpson of England who introduced it into surgery in 1847, one year after Dr. Morton, an American, had proved the value of ether as an anesthetic. Saccharine, which is a few hundred times sweeter than sugar, was first synthesized by an Ameri-

can chemist. Robiquet, a Frenchman, isolated codeine and narcotine; Pelletier and Caventou, likewise Frenchmen, quinine, cinchona, strychnine, and brucine; and M. Desfesses, solanine, the poisonous alkaloid of the black-nightshade. It was Kuno of America, who received a patent for antipyrene. The discovery of the antipyretic properties of antifebrin, known commercially as acetanilide, was due to a mistake on the part of the laboratory boy who supplied this substance in place of naphthalene asked for.

**(To Be Continued)**

Prof. Leigh in succeeding articles, gives further details of the progress in pharmaceutical chemistry, professional pharmacy and medical and dental research.

**FOOD AND DRUGS DIRECTOR SUSPENDED**

Dr. Lucius P. Brown, director of the Bureau of Food and Drugs in the Health Department, New York City and formerly State Food and Drug Commissioner of Tennessee from 1908 to 1915 when he was induced to accept a position in the New York Health Department, was suspended from duty, last week, by Dr. Royal S. Copeland, until the Board of Health decides on the merits of the testimony taken by Mayor Hyland's Investigation Committee.

The suspension of Director Brown follows charges of graft made against employees in his department, which are under investigation by the District Attorney. Dr. J. Lewis Amster, who resigned as Health Commissioner early last week, said that Mayor Hyland had demanded Dr. Brown's removal a week ago. Dr. Amster did not accede to the mayor's request because the District Attorney advised against it owing to Dr. Brown's work in clearing up graft cases and his aid in securing the indictment of accused employees.

Dr. Brown was born in Maury County, Tenn., in 1867. He was for many years a member of the firm of Memminger & Brown, analytical chemists. He was chemist of the Tennessee Agricultural Experiment Station for two years. He is a member of the American Chemical Society and many other scientific associations.

**FIFTY YEARS WITH MALLINCKRODT WORKS**

April marked the fiftieth anniversary of Henry W. Huning's connection with Mallinckrodt Chemical Works and the occasion was celebrated on the evening of April 30th with a banquet at the Mercantile Club, St. Louis. It was attended by the President Edward Mallinckrodt, officers and heads of the departments and the old employees of the company, who spent a very pleasant evening extending their congratulations to Mr. Huning. One of the features of the evening was the presentation to Mr. Huning of a beautifully engraved tablet expressing the sentiments of the firm and his co-workers, and which was signed by those present.

Twenty-eight of those attending the dinner had been connected with the company from 8 to 50 years. The total number of years they had served was 588 or an average of 21 years each, and this included only those connected with the St. Louis firm.

**MUST CURTAIL USE OF SULPHURIC ACID**

Arthur E. Wells, of the Bureau of Mines, testifying before the Senate Committee on Mines and Mining, last week, said the use of sulphuric acid by industries not engaged in war work will have to be restricted greatly before the end of the year. He declared the United States faced a serious shortage of acid due to a restriction in imports of pyrites from Spain. Mr. Wells spoke in favor of the metals and minerals bill, which appropriates \$10,000,000 to stimulate the production of metals and minerals.

**Clubs Expelling Germans**

The American Institute of Mining Engineers is having a house cleaning of German and pro-German members, following action on these lines by the Chemists Club. At a recent meeting, the institute determined to expel all German and Austrian honorary members and alien enemy associate and junior members. Bradley Stoughton secretary of the institute, estimated that between twenty-five and fifty German and Austrian mining engineers, now residing in the Central Empires, were still on the roll, while close to 400 enemy aliens in this and other countries were affiliated with the institute, which has a total membership of 6,750.

Among the German and Austrian members are some of the foremost mining engineers of the world. These include Dr. Emil Schroeder, German steel expert; W. Oswald, German metallurgist; Dr. B. B. Droege, inventor of the gas mask, originally used for miners in gas-filled shafts, and Dr. Hans von Hoefer, Austrian petroleum expert. Both Dr. Schroeder and Dr. von Hoefer are well known here.

The American Institute of Mining Engineers has laid before its directors resolutions demanding that all alien enemy members be dropped for all time from the records of the institute, requesting that all loyal members furnish the board with the names of alien enemy members, and providing that publicity be given to the resolutions. The board will act May 24.

The Chemists' Club has sent to its members a communication and a questionnaire. The former states that the club has voted the following rules into effect:

That the German language shall not be used in conversation in the club.

That all disloyal criticism of the United States government or the Allies must be avoided in the club.

That any member, resident or non-resident, whether an American citizen or not, whose sympathies favor the enemies of this country, is requested to resign.

The questionnaire consists of a card which each member is requested to fill out, giving his name, place of business or employment, nativity, birthplace of parents, citizenship, and stating whether he has any relatives in the army or navy or in other service of the government.

**OLIVE OIL EMBARGO RELAXED**

A cablegram from the American Consul General at Barcelona says:

"The Spanish Government, by royal order published April 24, permits, upon application to the General Direction of Customs within 10 days, the exportation of Spanish olive oil of recognized Spanish brands to American countries on the basis of shipments made to those countries during the five years from 1912 to 1916, no country being allowed more than its pro rata share. Shipment must be made in cans or bottles in the case of brands registered after July 31, 1914, or in any kind of containers for brands registered prior to that date. An export tax of 30 pesetas will be levied on each 100 kilos net. All exports are subject to control and licenses are revocable at any time by the national commission on supplies." (Peseta, par value, \$0.193; kilos, 2.2 pounds.)

The peseta, par value, is equal to \$0.193. A kilo is 2.2 pounds. The embargo on olive oil of all grades was announced by the Spanish Government on Sept. 7, 1917, and a notice was published in *Commerce Reports* on Sept. 12. See the issues of July 10, 20, and 23 for details of earlier and less complete prohibitions. An export duty of 40 pesetas per 100 kilos was imposed, as stated in *Commerce Reports* for Aug. 15.

## Demand for English Clay

Most of us think clay is something as common and abundant as sand or gravel. Consequently it comes as a surprise to be told by the Shipping Board Committee on Mineral Imports and Exports in Washington, that even in this day of great shortage of ocean going ships we have to import from England every year 200,000 to 250,000 long tons of clay. Last year we imported more than 250,000 tons over the ocean.

Furthermore, a great part of this clay comes over in steamers loaded full and the rest in big steamers loaded with clay up to 50 % and more of their maximum carrying capacity. These ships put into Fowey, England, for their freight. To get this clay on and off the boats requires ten days on each cargo. An insignificant percentage of the clay is shipped as ballast. This represents small lots loaded into big liners at Liverpool. But it will be seen that the importation of English clay consumes an important amount of ship tonnage measured in days time lost because of natural delays incident to the transport of this freight.

Why do our manufacturers pay the high freight rates now necessary in order to obtain an article like clay from England? There is, as we all know, an abundance of clay in this country. A great deal of high grade clay is produced here, and of a character suitable for pottery, porcelains and other articles which require clays of special excellence in their manufacture. But not much over half of clay of this grade that our industries require is domestic. When war broke out in 1914 only a third of it was domestic. We have not been able to develop and equip our deposits fast enough to make these English clay imports unnecessary. In fact it is doubtful whether we will produce as much high grade clay in 1918 as we did in 1917. Our manufacturers want the clay but they can not get anywhere near as much as they want. The reduced output is due to railroad and operating conditions and is not related to the character or size of the deposits which are capable of large production.

Domestic producers do not mine their clay quite as cleanly as their English competitors. Nor is the domestic clay as uniform in character. It will not bring the high prices paid for English clay. But more could be sold if it could be produced and carried to its market. Still more could be marketed if cleaner, more uniform clay were produced, for in that event the consumers would use a greater percentage of domestic and correspondingly less English clay in their mixtures.

However, our complete dependence upon English clay continues. We must rely on English clay as a chief ingredient of the dishes we eat from, the paper in our books and magazines, the porcelain in our electric light sockets and half a dozen other articles of less general use.

Besides domestic clay there are many other substances of domestic origin that could be used in the body, not the finish of paper. Also over half of the English clay we use is consumed in making paper. So that if a shortage of English clay should develop, it would not be highly serious until the shortage became very great, until there was only a half of the normal supply or less available.

The Shelby Chemical Company has begun the erection of a plant near Shelby, Ala., for manufacturing hardwood products in connection with the blast furnaces of the Shelby Iron Company. The plant will consume 100 cords of wood per day. The plant is to be completed by August and will begin deliveries at once.

## MUST NOT FIX RESALE PRICES

### Federal Trade Commission Decides Against Manufacturers who Seek to Check Price Cutting—Case of Chester Kent & Co., of Boston

The Federal Trade Commission in deciding the case against Chester Kent & Co., Inc., of Boston, involving the right of the company to fix the resale price of its goods by agreement and to refuse to sell to dealers who fail to adhere to such prices, has issued an order which forbids the company to follow any of the methods heretofore practiced by manufacturers who insist upon price-fixing contracts.

Attorneys for the company admitted that in the past the practices complained of had been in use. The order, the first in cases of this character, forbids the company to—

(a) Indicate to dealers the prices for which its proprietary or patent medicines shall be resold.

(b) Securing agreements from dealers to adhere to such prices.

(c) Refusing to sell to dealers who fail to adhere to such prices.

(d) Refusing to sell to dealers who fail to adhere to such prices upon the same terms as dealers who do so adhere.

(e) Furnishing any advantage to dealers who adhere to the resale prices, while refusing similar treatment to dealers who do not adhere to the prices.

This order of the commission follows the decision of the Supreme Court of the United States in the American Graphophone Co. case lately decided by it.

Some of the most distinguished lawyers in the United States have appeared before the commission to argue this question, as well as many of the leading business concerns of the country, some of whom have insisted that the maintenance of resale prices was proper, and others who have contended that it was not. Almost all of the large department stores of the country have been heard in opposition to it.

After full consideration the Federal Trade Commission has decided to issue complaints against all business concerns who refuse to sell unless the purchaser will agree to maintain a resale price fixed by the seller. The case just decided is the first formal finding by the commission to that effect. When once an article has passed from the maker to a purchaser he owns it, and the owner of such article may sell it at any price that he chooses, provided he does not himself sell it at such price as to be below cost, and thus thereby enter into unfair competition with other retailers selling the same article.

The decision will lead to considerable controversy in relation to the subject matter thereof, and the matter will probably have to be settled by an act of Congress in the manner suggested by Mr. Justice Brandeis in his concurring opinion in the Supreme Court of the United States, in the case of the American Graphophone Co. The Stephens bill, which is now in Congress, is in relation to that matter, but in the estimation of many business men and others it is thought to be broader than it should be. It may be that resale prices can be so regulated by placing the power somewhere protecting against unfair prices as to make it work equitably, and be a fair method of competition in commerce, but that question will undoubtedly have to be settled by congressional action.

## N. J. ZINC COMPANY'S EARNINGS

The New Jersey Zinc Company's statement for the quarter ended March 31 shows net income of \$3,603,796. A quarterly dividend of 4 per cent. payable May 10 has been declared, leaving a net surplus of \$2,203,796.

## Foreign Trade in Chemicals

Statistics showing the quantity and value of imports and exports as given in the Monthly Summary of Foreign Commerce of the United States just issued for the month of February 1918, compared with those of the corresponding month of last year, follow:

	IMPORTS		1918		1917	
	Quantity	Value	Quantity	Value	Quantity	Value
Oxalic acid .....	11,109 lbs.	\$4,180	123,740 lbs.	\$59,864	469,054 "	44,492
Muriate of Ammonia, (or Sal Ammoniac) .....	.....	.....	.....	.....	34,880 "	2,330
Carbonic acid .....	63,321 "	85,351	135,571 "	254,972	87,616 "	146,146
Natural indigo .....	114,377 "	228,336	7,675,452	616,553	126,944 "	34,852
Synthetic indigo .....	2,280,185 "	1,437,569	160,550 "	13,988	All other tanning mat. ....	37,021
Quebracho .....	.....	.....	423,374 "	154,324	Crude Glycerin .....	942,645
.....	.....	.....	51,289	69,737	Gambier .....	469,812
Shellac .....	1,131,345	426,418	2,325,793	514,760	.....	.....
Crude Iodine .....	20,798	43,419	60,934 "	164,950	.....	.....
Citrate of lime .....	367,323	66,023	.....	.....	.....	.....
Magnesite .....	770,070	23,992	167,870 "	8,129	.....	.....
Opium .....	7,995	158,994	473 "	2,474	.....	.....
Carbonate of Potash .....	300,649 "	95,367	150,514 "	25,475	.....	.....
Cyanide of Potash .....	.....	.....	2,660	1,202	.....	.....
Hydrate of potash .....	.....	.....	18,992 "	11,750	.....	.....
Nitrate of potash, (or Saltipeter) .....	1,244,048 "	130,509	52,100 "	8,074	.....	.....
All other potash .....	184,558 "	71,482	52,493 "	29,691	.....	.....
Cyanide of soda .....	6,382 "	2,442	441,037 "	208,688	.....	.....
Nitrate of soda .....	100,344 tons	4,673,443	129,186 tons	4,495,770	.....	.....
All other soda .....	.....	47,843	.....	59,090	.....	.....
Sulphur, or brimstone .....	50 "	1,590	9 "	391	.....	.....
Sumac ground or ungr'd .....	1,497,749 lbs.	52,907	616,566 lbs.	21,672	.....	.....
Logwood .....	2,937 tons	73,479	3,272 tons	67,771	.....	.....
All other dyewoods .....	7,828 "	225,639	155 "	1,803	.....	.....
Sulphate of ammonia .....	225 "	25,335	830 "	66,146	.....	.....
Muriate of potash .....	79 "	21,173	10 "	1,552	.....	.....
Sulphate of potash .....	21 "	3,996	25 "	2,826	.....	.....
Gelatin, unnm'd .....	80 lbs.	37	34,002 lbs.	13,201	.....	.....
Glue and glue size .....	132,736 "	31,563	530,878 "	76,067	.....	.....
Sulph. ore as pyrites .....	55,346 tons	266,594	75,918 tons	618,117	.....	.....
Mangrove bark .....	.....	.....	77 "	2,469	.....	.....
Quebracho wood .....	14,351 "	226,577	5,339 "	79,455	.....	.....
	EXPORTS		101 tons	2,536	.....	.....
Bark for tanning .....	397,230 lbs.	157,244	.....	.....	.....	.....
Carbolic acid .....	16,966 "	2,117	.....	.....	.....	.....
Nitric acid .....	2,106,566 "	44,336	7,140,279 lbs.	99,043	224,749	3,167,463
All other acid .....	.....	.....	.....	.....	.....	.....
Wood alcohol .....	26,102 gals.	35,993	92,354 gals.	71,052	.....	.....
Baking powder .....	229,502 lbs.	56,726	360,557 lbs.	75,701	.....	.....
Calcium carbide .....	1,779,526 "	91,931	2,339,337 "	79,385	.....	.....
Benzol .....	239,955 "	17,169	.....	.....	.....	.....
Copper sulphate, (of blue vitriol) .....	1,387,444 "	144,054	1,941,601 "	953,259	.....	.....
Logwood extract .....	.....	179,382	.....	.....	.....	.....
All other extract .....	.....	297,278	.....	.....	.....	.....
Formaldehyde .....	.....	67,176	.....	.....	.....	.....
Glycerin .....	1,227,606 lbs.	657,796	.....	.....	.....	.....
Acetate of lime .....	336,619 "	21,300	611,495 lbs.	21,630	.....	.....
Chloride of lime .....	927,425 "	26,475	.....	.....	.....	.....
Chlorate of potash .....	168,228 "	63,837	.....	.....	.....	.....
Caustic soda .....	5,037,168 "	354,048	.....	.....	.....	.....
Sal soda .....	930,950 "	12,953	.....	.....	.....	.....
Silicate of soda .....	1,602,550 "	22,309	.....	.....	.....	.....
Soda ash .....	12,135,695 "	484,443	.....	.....	.....	.....
Sulphur of brimstone .....	15,383 tons	340,121	17,079 tons	343,857	.....	.....

## New Incorporations

The Star Chemical Co., Toledo, O., capital \$5,000. John M. McCabe, Elmer E. Kirkbridge and others.

McHale Manufacturing Co., Memphis, Tenn., capital \$15,000. To manufacture chemicals and medicines. T. J. McHale, H. D. Hughey, R. F. Malone, T. H. McKnight and James H. Malone.

New Jersey Aniline Corp., Manhattan, capital \$10,000. A. F. Stine, H. Neuenzer, V. F. M. Marchesell, 263 West 113th street, New York City.

The Master Remedies, Manhattan, capital \$25,000. Dyes, Chemicals and drugs. C. E. Morris, M. R. Craven, C. P. Scheid.

Litho Machinery Co., Manhattan, capital \$10,000. J. G. Kremer, H. & I. Weinstein, 330 West 170th street, New York City.

R. D. Kehoe & Co., Inc., Manhattan, capital \$5,000. To make potash and chemicals. M. Freedman, E. Brennan, T. Abramson, 2 Rector street, New York City.

Meta-Chemical Co., Inc., Claverack, Columbia Co., N. Y., capital \$60,000. H. Amerman, A. H. Stack, H. T. Beers, 233 Broadway, New York City.

World Chemical and Metal Co., Manhattan, capital \$100,000. R. H. Hirsch, S. R. Hopkins, Jr., C. Kennedy, 2 Rector street, New York City.

Hervco Mfg. Co., Camden, N. J., capital \$25,000. Chemists. Earl H. Rider, Frank W. Garrison, Arthur F. Besser, all of Camden, N. J.

H. Poggense Chemical Co., Ramsey, N. J., capital \$50,000. Philip S. Clarkson, Albert H. Hein, Benjamin P. DeWitt.

## Patents & Trade Marks

### PATENTS

Granted April 16, 1918.

1,262,614—Benjamin Adriance, Brooklyn, N. Y. Manufacture of bottle-seals.

1,262,630—Charles F. Brown, New York, N. Y., assignor of one-half to Arthur D. Dickerson. Faucet for dispensing liquids.

1,262,638—John F. Class, Dayton, Ohio. Medicinal-vapor generator.

1,262,676—Hisataro Kiriyama, El Monte, Cal. Combined toy and advertising device.

1,262,757—Elmer F. Deeter, Dayton, Ohio. Non-refillable bottle.

1,262,769—James B. Garner, and Howard D. Clayton, Pittsburgh, Pa., assignors to Metals Research Company, New York, N. Y. Manufacture of chlorinated hydrocarbons.

1,262,888—Albert Westlake, New York, N. Y. Mouth-tablet.

1,262,938—Hugh A. Galt, Akron, Ohio, assignor to Columbia Chemical Co., Barberton, Ohio. Process for manufacturing magnesium salts.

1,262,939—Hugh A. Galt, Akron, Ohio, assignor to Columbia Chemical Co., Barberton, Ohio. Process of making magnesium chlorid.

1,263,993—Edward J. Stewart, Brookline, Mass. Bottle-capping machine.

1,263,031—Kirk Brown, Montclair, and Donald S. Kendall, East Orange, N. J., assignors to Condensite Company of America, Bloomfield, N. J. Condensate product and method of preparing same.

1,263,119—Friedrich Ruppert, Mainz-Mombach, Germany, assignor to Verein Fur Chemische Industrie in Mainz, Frankfort-on-the-Main, Germany. Cellulose acetate and a process of making same.

1,263,238—Max Hartmann, Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Therapeutically valuable derivatives of para-aminophenol.

1,263,258—Otto Liebhnecht, Frankfort-on-the-Main, Germany. Production of percarbonates.

1,263,284—Roger Piogey, Paris, France, assignor to Piogey & Cie. Process of manufacture of a plastic non-inflammable and odorous material.

1,263,289—Frederick C. Ruff, Los Angeles, Cal., assignor to By-Products Manufacturing Co., San Francisco, Calif. Purifying gasoline fractions containing aromatic hydrocarbons.

### TRADE-MARKS

Granted April 16, 1918.

105,896—Thomas G. Hitt, Seattle, Wash. Perfumes.

106,121—Puri-Tis Chemical Co., Detroit, Mich. Hair-tonic.

108,662—Madam Nannie Bond, Bessemer, Ala. Hair-grower.

108,741—Bush, Beach & Gent, Inc., New York, N. Y. Dyestuffs.

109,145—Lloyd Adams, South Brownsville, Pa. Remedy for gall-sores, and cuts in animals.

109,160—Bernard E. Studer, Los Angeles, Cal. Remedy for nervous conditions due to monthly periods or change of life.

109,173—Leon Gawurin, New York, N. Y. Face-powder.

### APPLICATIONS FOR LICENSES

Patent No. 1,139,031, dated May 11, 1915, to Fritz Gossel, of Frankfort-on-the-Main, Germany. "Manufacture of artificial milk." License applied for by Albert B. Moses, 909 Eighth Ave., Seattle, Wash.

Patent No. 711,377, dated October 14, 1902, to Max Bazlen, of Ludwigshafen, Germany, assignor to the Badische Anilin & Soda Fabrik of Ludwigshafen, Germany, a corporation of Germany, for "Solid alkaline hydrosulphites and process of making same." License applied for by E. C. Klipstein & Sons Company, 644 Greenwich St., New York City.

Patent No. 795,755, dated July 20, 1905, to Max Bazlen, of Ludwigshafen-on-the-Rhine, Germany, assignor to the Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation of Baden, for "Process of making stable dry hydrosulphites." License applied for by E. C. Klipstein & Sons Company, 644 Greenwich St., New York City.

Trade-Mark No. 16,788, dated July 9, 1889, to Gebruder Avernius, of Gaualgesheim, Germany. "Carbolineum Avernius." Trade-mark for preserving paint. License applied for by C. A. Wood Preserver Company, Fullerton Building, St. Louis, Mo.

Patent No. 782,739, dated 1905, to Emil Fischer, Berlin, Germany. "C-Dialkylbarbituric acid and process of making same." License applied for by Antoine Chiris Co., 18 Platt St., New York City.

Patent No. 837,017, dated 1906, to Carl Auer von Welsbach, Vienna, Austria. "Pyrophoric alloy." License applied for by The Pfanzlief Company, Inc., North Chicago, Ill.

Patent No. 1,075,171, dated 1913, to Albrecht Thiele and Georg Wichmann of Berlin Germany. "Process for the manufacture of 2-phenylquinolin-4-carboxylic acid." License applied for by Caleo Chemical Company, Bound Brook, N. J.

Patent No. 1,043,349, dated November 5, 1912, to Heinrich Ostwald, of Cologne, Germany, for "Ball-mill." License applied for by F. L. Smith & Co., 50 Church St., New York City.

## Demand for Nitrates

In the five years preceding the war Germany imported an annual average of 700,000 tons of nitrate of soda from Chile, France about 350,000, Belgium for herself and neighbors about 350,000, Great Britain 150,000, the remainder of Europe about 300,000 tons and the United States about 500,000, says O. P. Austin, statistician of the National City Bank. While some of this was used for the production of explosives, especially by Germany and France, and also limited quantities for the production of nitric acid for chemical industries, a very large proportion was used in times of peace as soil food.

With the opening of the war all of the great importers of nitrates, Germany, France, the United Kingdom and the United States, realized the importance of greatly increasing their nitrate supplies for use in manufacturing war material as well as a continuation of its use for soil food. True, they might be able to stint their lands in the use of nitrate for a single season, but as the war stretched out over a second, and then third year, it became more necessary to resume the feeding of their soils in order to supply the necessary food for their people, even though they must also have great quantities of the material in producing war munitions.

This was especially true with Germany, which was early in the war period cut off from over-sea transportation, and as there was no natural nitrate supply in any adjacent country she realized even more keenly than did the other participants in the war the absolute necessity of manufacturing nitrate at home. She must have it for manufacturing explosives, and must also have it for her soils on which she was compelled to rely to a greater extent than ever before for the food supply of her people. So she resolutely turned to the increased development of existing artificial sources of nitrate supplies and set her army of chemists at work to apply these on a great commercial scale. Instead of the 700,000 tons of nitrate of soda which she had normally used she must now have two or three times its equivalent.

## CONSERVATION IN PHARMACY

(*Special to DRUG AND CHEMICAL MARKETS*)

Washington, D. C. May 7.—There will be no effort by the General Medical Board of the Council of National Defense to secure the conservation of sugar and alcohol in medicinal products, according to Dr. Franklin Martin, chairman of the board. The question has been under consideration by the board for several weeks, as well as that of conserving glycerin.

It has been declared that Governmental and other authorities interested, realizing that careful consideration should be given the subject, recently met and debated the advisability and necessity of conservation measures from the standpoint of medical needs. In view of the importance of alcohol, sugar and glycerin in the manufacture of pharmaceutical preparations and of the limited possibilities for the conservation of alcohol and sugar therein, it has been deemed advisable to refrain at this time from recommending conservation, of sugar and alcohol insofar as their use in pharmaceutical preparations is concerned.

The amount of glycerin used in medicine, when compared to the available supply, was found to be relatively large and a committee has been appointed to investigate formulae, manufacturing processes, etc., requiring glycerin, and to submit plans for the curtailment of the quantity now used in case future developments should make it necessary to adopt conservation measures in relation to medicines.

## CITRIC ACID PRODUCTION IN U. S.

**Tariff Commission Reports That the Output Is Increasing—California Fruit Growers Interested—Product on the List of Restricted Imports**

War has encouraged the production of citric acid in the United States, according to a preliminary report on this industry just made by the United States Tariff Commission. Quantities of this acid were previous to the war imported from Sicily, but the United States has placed it upon the restricted import list. Despite this action the price of the acid, it was said, was held firm by the control exercised by the Italian Citrus Chamber. Nevertheless the price rose and in January of this year was about twice the price commanded previous to the war.

The Tariff Commission stated that it had given special study of citric acid in connection with its investigations of the chemical industries. Sicily in the past has practically supplied the world with citrate of lime, the raw material from which citric acid is obtained. The product offers a convenient and profitable utilization of the culms and inferior fruit of the great Sicilian lemon industry. Italy exported almost 15,000,000 pounds of citrate in 1915, two-fifths of which was consumed in the United States. In 1917 the imports of citrate of lime into the United States amounted to 6,361,458 pounds. The War Trade Board placed citrate of lime on its first list of restricted imports. A special license for each importation must be secured in advance and this license will only be granted on return cargoes from European points and then only upon condition that the material be loaded from a convenient port and without delay.

The Federal census reported the production of 2,729,943 pounds of citric acid in 1914, which was but a slight increase over the figures reported in 1904 and 1909. As one might judge roughly from the import statistics for the raw material, however, production increased tremendously in 1915. The statistics reported by the Tariff Commission show that in 1915 the United States produced 3,417,795 pounds of citric acid; in 1916, 4,182,478 pounds, and in 1917, 4,032,897 pounds.

The California lemon growers entered into active competition in 1915, when the Californian Fruit Growers' Exchange established a co-operative plant for the recovery of the by-products of the lemon industry. No product was reported until 1916, and although considerable progress has been made, the Californian industry has not as yet offered serious competition to the Sicilian producers of citric acid. The Bureau of Chemistry of the Department of Agriculture has been interested in the citrus industry, and has a special laboratory in California engaged in the study of its problems.

The price of citric acid since the war began has not been subject to the radical fluctuations noticeable in many of the chemicals, principally because of the controlling influence of the Italian Citrus Chamber. There has been a gradual but material increase, however, and in January, 1918, citric acid was selling for about twice the price quoted in January, 1913. Very recently the Government has come into the market for considerable quantities of citric acid, and this, combined with the import restrictions on the raw materials, has caused the market to be particularly unsteady. Second hands have recently demanded as much as a dollar a pound, although the manufacturers on April 15 were quoting citric acid at 82½c.

The United Drug Company has declared a quarterly dividend of 1½ per cent. on the second preferred stock, payable June 1 to stockholders of record May 15.

### EFFECT OF WAR ON PROPRIETARIES

**Manufacturers in Annual Convention Discuss Problems Affecting the Industry—Frank A. Blair Elected President—Sessions Held Behind Closed Doors**

The Proprietary Association of America held its thirty-sixth annual meeting at the Hotel Astor on Tuesday and Wednesday of this week, and discussed the effect of the war on the patent medicine business. The sessions were held behind closed doors. Frank A. Blair, of Foley & Co., Chicago, presided. At the first session a nominating committee was chosen, consisting of the following: Messrs. Kamp, Weiss, Beardsley, Mitchell and Gove. In this connection it was pointed out that for the first time in the history of the organization the nominating committee was directed from the floor of the meeting to cast one ballot re-electing Frank A. Blair, president for the ensuing year. A buffet luncheon was served from 12:30 to 2 P. M. in the meeting room. War talk featured the early hours of the afternoon session.

Government measures affecting the industry received special attention. The topics of transportation and the shipping of certain articles throughout the country were treated exhaustively. H. B. Thompson presented the report of the general attorney, following the discussion of war problems. The report of C. P. Tyrrell, secretary-treasurer of the association, marked the close of Tuesday's meeting.

On Wednesday the following reports were presented: Committee on Trade Interests, J. F. Murray, New York; Committee on Membership, S. P. Jadwin, New York, and Committee on Legislation, W. E. Weiss, Wheeling, W. Va. President Blair summed up the work accomplished, and unfinished business was then disposed of. New business followed, after which the election of the remaining officers for the coming year took place.

### GRASSELLI CO'S. CANADIAN BUSINESS

Among the Canadian chemical companies the business of which has been considerably extended, owing to war requirements is the Canadian branch of the Grasselli Chemical Co., Ltd., with head office in Toronto and factory in Hamilton. The business was established in 1911 and its products include sulphuric, muriatic, nitric and acetic acid, Glaubers salts and spraying materials. The supply of pyrites as raw material is largely furnished by the company's own mines.

A great stimulus was given to its operations by the demand for its leading products for munition manufacture. At the outbreak of the war it employed a force of about 120 men and it has now some 200 on the pay-roll. The present output of the plant is about 3,000 tons of sulphuric acid, 300 tons muriatic acid and 300 tons nitric acid per month. In addition to furnishing a supply to Canadian munition manufacturers the company does a limited export trade with the United States, Australia and Japan.

### WOMAN APPOINTED CHIEF CHEMIST

Miss Edith Talpey of Bayside, L. I., a graduate of Barnard College, who has been employed in the laboratory of the General Chemical Company in Long Island City, has been appointed chief chemist of the General Chemical Company's plant at Kingston, Ontario, Canada.

The Cambridge Color and Chemical Company, Somerville, color manufacturing, has been organized in Massachusetts with capital stock of \$100,000. The incorporators are William T. and Katherine Beattie of Arlington and A. M. Gorham of Watertown.

### GERMAN ACTIVITIES IN DYESTUFFS

Dr. Edward E. Pratt, vice president of the Pacific Commercial Company, New York, told the National Association of Cotton Manufacturers, last week, about German trade activities in the United States, saying:

"Even after a year of war German concerns are permitted to exist and do business in this country," said Dr. Pratt. "Some of them have been subjected to a thin coat of whitewash administered by the Custodian of Alien Property.

"But their business organizations still exist; they continue German in sentiment and in personnel. And they will be ready to go out in behalf of Germany as soon as the war is over, if, indeed, they are not doing it now.

"There is no excuse for such laxity in the administration of our laws. Enemy concerns should be wiped out. The installation of a representative of the alien property custodian is not enough. The affairs of every German concern should be wound up, and the property sold outright to Americans. More important still, the present German organizations should be replaced with American organizations.

"I have only to point to the dye business, and to ask if the German distributors are out of business. Or are they holding on for grim death, hoping for the end of the war, when they can stifle America's young and growing dye industry?

"Only last week a German concern now changed in name, offered a New York concern some dyestuffs under their own—the German—trade name. Why, I ask the alien property custodian, have firms, once completely German, still openly so, and even now endeavoring to preserve German trade interests, been permitted to go on and do business? Why has the alien property custodian permitted the change of a name to purify a German concern reeking with plans to further German trade interests now and after the war?"

### BRITISH AGAINST TRADE WAR

The British Committee headed by Lord Balfour of Burleigh, which was appointed by Herbert H. Asquith, then Premier, in 1916, to consider the question of trade and industrial reconstruction after the war considers that it would neither be practical nor economically sound to attempt to make the empire entirely self-supporting in the matter of raw materials. The committee foreshadows the inevitability under modern conditions of the formation of combinations to control domestic marketing, and sales of overseas productions. It thinks that public opinion, hitherto antagonistic, will have to be modified.

### EXPLOSION AT SCHOELLKOPF WORKS

An explosion in the Buffalo plant of the National Aniline and Chemical Company, Inc., on Monday, May 6, resulted in the injury of seventeen men, six of whom may die. The property loss was small. The explosion occurred in the color mixing mill where a large vessel containing dye liquid burst and spread the dye and suffocating fumes over the men employed there. The plant is known as the Schoellkopf Works.

### MAY YET OBTAIN CINCHONA BARK

The Department of Commerce, Washington, has received word that the Netherlands Government denies having placed an absolute embargo on the exportation of cinchona bark and quinine from Java. With the object of conserving supplies, it is said that these products and kapok and tin are to be placed on the restricted list subject to a licensing system.

## Trade Notes & Personals

W. B. D. Penniman, of the firm of Brown and Penniman of Baltimore, has accepted the position of chemist on the staff of the U. S. Shipping Board.

Dr. E. B. Spear, professor of chemistry of the Massachusetts Institute of Technology, has been appointed consulting chemist to the Bureau of Mines in connection with the gas warfare work.

Receivers for the Aetna Explosives Co., Inc., report \$641,460 net profit for March after deducting \$168,964 covering amounts which have carried as assets and the value of which has not been determined until the present time. Gross profit was \$810,424.

Dr. E. P. Wightman, formerly a research chemist for Parke, Davis and Co., Detroit, Mich., who enlisted in the 30th Engineers Regiment U. S. N. A., and was later transferred to the Chemical Service Section has been promoted to First Lieutenant and has been sent to the overseas laboratories.

Eighty new oil companies were incorporated in the United States in April with an authorized capitalization of \$35,000,000, according to the monthly report of the *Oil Trade Journal*. This compared with the seventy companies chartered in March with a capital of \$80,000,000 and fifty-five companies in February with total capital of \$60,000,000.

V. V. Kelsey, Industrial Agent for the Carolina, Clinchfield and Ohio Railway, has severed his connection with the railroad to become resident manager for the American Wood Reduction Company at their plant now building at Kingsport, Tenn., for the distillation of hardwood. He is retained by the railway company in a consulting capacity.

Among the demonstrators in McGill University last year the following are now doing work in connection with the war: M. J. Marshall is with the Shawinigan Electric-Metals Company, Shawinigan Falls, Que.; C. F. Hamill is at the New York State College of Forestry, Syracuse, N. Y.; W. J. Geldard is engaged on war work for the American Government; G. L. Magoun is with the du Pont Powder Company, Wilmington, Delaware.

The Amsterdam Chamber of Commerce has urged the resumption of shipping traffic between the Dutch East Indies and the United States on the ground that the accumulations of colonial products were assuming unmanageable proportions, with consequent deterioration, especially in the supplies of tobacco, tea and rubber, while the difficulties of financing and insuring the cargoes, it was added, were becoming well nigh insuperable.

The Department of Labor, New York, says that all industries in the chemicals, oils and paints group, reported increases in both number of employees and amount of wages for March, 1918, as compared with February, 1918, recording one and one-half per cent. more activity for the number of employees and nine per cent. for the amount of wages. With the exception of paints, each sub-group had more workers than last year, especially drugs and chemicals with eight per cent. and miscellaneous chemical products with six per cent. more employees. Numerous firms in these chemical industries are contributing to the output of munitions. For the group, the wage payments were nine per cent. more than in February, 1918, and nineteen per cent. more than in March, 1917.

## CHEMICAL RESOURCES GAINED BY GERMANY

**Deposits of Manganese, Phosphates for Making Sulfuric Acid, and Crops Yielding Vegetable Oils Now Under German Control—Copper Abundant**

The meaning of the somewhat cryptic slogan "A place in the sun," for which Germany claims she is fighting, appears to be, in view of her policy of conquest, the establishment of a great economic empire which shall be as far as possible self-sufficient. By the successive creation of "self-determining, independent states" in Middle Europe, which are nothing more or less than German protectorates, she is aiming to acquire control over sources of raw materials that her industries may not be forced to rely on foreign sources for their supplies. The acquisition of Western Russia and a large part of the Balkans is a partial realization of this plan. One of the most valuable regions of Russia from an economic point of view is the district lying between Poland and the Sea of Azov, comprising the valleys of the rivers which flow into the Black Sea. This is the country which has been recently erected into the nominally independent state of Ukrainia. Speaking of the resources of this region upon which Germany can now freely draw, *The Americas* says:

"The annual crop of hemp in the Ukraine area approximates 80,000 tons of fiber. For years the greater part of this was exported to Germany. Apart from its fiber, the hemp plant is of value for its oil-bearing seeds. The notable shortage of vegetable oils, and indeed of fats and oils of all kinds, in the Central Empires, makes the supply of hempseed oil, which resembles linseed oil, of considerable importance. The pressing of the oil from the seed is done on a large scale in Russia, and the meal made into the form of cake for feeding to stock.

"It is not unlikely that one of the most important resources of the entire Ukraine from the German standpoint will prove to be her deposits of manganese. This rare metal, which is a necessity to any nation developing an independent steel industry, is found only in a few places scattered over the world. Russia, British Indies, and Brazil are the only countries that have as yet developed large supplies of manganese. Both in the deoxidizing and hardening of steel manganese is a necessity. Germany, as far as is known, has within her borders no sources capable of supplying anything like the quantity that her steel foundries require. The leaders of the German Steel Trust have long looked forward to the day when an adequate supply of manganese might come under direct German control. Germany's imports before the war were about 500,000 tons annually, in the shape of ore, of which the greater part came from Russia. The largest Russian output is from the Caucasus, in the region to be annexed to Turkey, according to the peace treaty, but the second most important mines are near Nikopol, on the Dnieper River, about sixty miles southwest of the Krivoi Rog iron mines. The output there before the war was over 300,000 tons of ore annually. Excepting for a rather large phosphorus content the ore is of very good quality. Transportation by water down the Dnieper to the Black Sea is easily accomplished.

"Additional manganese deposits which have been worked commercially are located in Podolia within reach of the Bug River, which also flows into the Black Sea. The ore runs as high as 60 per cent. manganese, with only a trace of phosphorus. The reserves of ore are very large. An additional mineral resource of the province of Podolia is its phosphates, used in the manu-

facture of sulphuric acid, which is itself the basis of a great number of heavy chemical products. Phosphates are also one of the essential ingredients of all complete artificial fertilizers, and hence of great value to an intensive agriculture such as that of Germany. Germany in 1912 imported 800,000 tons of phosphates, largely from the United States. The Podolian deposits are not at present very extensively worked, but it is believed that this output could be made to reach a considerable figure. They would be far from capable of supplying Germany's needs, however."

Those regions of southern Russia which Germany has found inexpedient either to annex directly or to bring under her immediate control, she has forced to be ceded to Turkey under the provisions of the peace treaty concluded with the Bolshevik government.

A scarcely less valuable region than the Ukraine from the standpoint of the planners of a Mittel-Europa economic empire is that assigned to Turkey as her share of the spoils, which includes a large part of the Caucasus, and the peninsula of the Crimea. The oil wells of the Caucasus are world-famous. Oil is found in many places in the various provinces about the shores of the Caspian Sea, the oldest and most developed center being near Baku in Trans-Caucasia. The oil wells of the Baku district in 1913 produced 7,717,000 tons of petroleum. Trans-Caucasia also produces very large quantities of manganese; in fact, before the war it was one of the chief sources of supply for the entire world. The mines are located near Poti on the Black Sea, and in 1913 produced 970,000 tons of ore, more than enough to supply the entire Teutonic steel industry. The deposits are practically inexhaustible, estimates running into the hundreds of millions of tons. Part of these mines were, before the war, more or less under German influence, owing to large investments in them by the German steel interests. The hills near the Black Sea shore southwest of Batum are known to contain copper ore, and near Batum a British company has a large mine. German capital is also represented in this district.

In the German scheme of an economically self-sufficient empire, however, there is the lack of a source of tropical products. One of the most important groups of these products is that of gums and resins, including rubber and gutta percha.

Germany in 1912 imported 15,632 tons of rubber alone and 104,860 tons of resins. Synthetic rubber would appear to be the only possible source of this commodity within the German Empire. Another great group of products not adequately produced in the empire is that of oils and fats. The exhaustion of flocks, due to their killing off for meat, has reduced the output of animal fats, and the vegetable oils are derived largely from tropical products like copra, from the coconut, and the palm fruit. The imports of linseed and flaxseed oil from Russia help the situation in some degree, but the cutting off of the supplies of cottonseed oil from America cannot easily be remedied.

A wood-chemicals plant costing \$1,300,000 will be built at Lyles, Tenn., by the Bon Air Coal & Iron Corporation, Nashville, to furnish methyl alcohol and acetate of lime to the Government. The machinery will cost \$500,000, and the powerhouse, stillhouse, 20 retorts, etc., will cost \$800,000, the daily capacity to be 40,000 to 50,000 pounds of acetate of lime, 2,000 to 3,000 gallons of crude alcohol and 10,000 to 20,000 bushels of charcoal.

The War Trade Board announce that, effective May 2, 1918, radium has been placed on the Export Conservation List.

## OUTLOOK FOR BOTANICAL DRUGS

### Domestic Crop Prospects Reviewed by C. S. Weiscope of Michigan Ginseng Growers Association—Some Roots, Leaves and Herbs Very Scarce

The crop outlook for domestic cultivated botanical drugs is discussed by C. G. Weiscope, secretary-treasurer of the Michigan State Association of Ginseng Growers in an interview with a representative of *Drug & Chemical Markets*, in which he says:

Belladonna leaves, herb and root: From present indications there has been a lot of this article transplanted from greenhouses, during the last two or three weeks, in the West. The Middle West will not start transplanting until after the 15th. of May. While there will be a lot of acreage put out in various parts of the United States this season, even with an unusual crop harvest there will not be an over production. It will have the tendency, however, to establish lower selling prices for all grades of the domestic as well as the imported. Quotations are now being made on very high testing (above U. S. P.) leaves, herb and roots from California.

Some of the domestic growers carried over some stock, to take advantage of higher prices that usually prevail during this time of the year, but owing to the fact that of late several large parcels of both leaves and roots have arrived in the New York market from abroad, with reports that other parcels are afloat and with no buying movement prices are at a standstill and several reductions have been made to turn goods into cash, but no sales have been reported, other than shipments to those who placed orders several months ago.

The domestic can be cultivated at a very low cost in large parcels and this may reduce prices a great deal. The quality cultivated in the Middle West will be of higher test this season, owing to improved methods of growing and transplanting; also due to the fact that a lot of two and three year old leaves, herbs and roots, will be harvested.

Henbane leaves:—There has been no attempt made to cultivate any additional acreage. With a moderate collection of the wild, which is native to the West, there will be supplies to meet requirements.

Cannabis Indica:—Very good success has been obtained in the cultivation of this article for making hemp, twine and ropes. The tops, (capsules) are taking the place of Bombay tops in the drug trade. If crop conditions are favorable a very good quality of tops will be harvested.

Goldenseal Root: From present indications there will not be the usual amount of Spring root put on the market this year. Growers will not be able to devote their time to it, as with the shortage of labor they will have their hands full in attending to the planting of the crops. There has been a steady movement in the New York market, but there seemed to be sufficient stock to go around. If, however, several of our large manufacturers should come into the market, it would be difficult to secure any quantity without assembling parcels from all holders, which means paying prices above the market. However, inasmuch as the growers of this article are also growers of ginseng root, they might be compelled to turn all their goldenseal root that will be in the ground, into cash, owing to the small exportations of ginseng root to China. This would only happen in the case of some few growers, who depend upon their goldenseal and ginseng gardens, for income. Others will no doubt let the roots stay in the ground through next winter.

Ginseng Root: The true wild root is almost a thing of the past now. This will mean a large demand for the fancy grades of the cultivated.

## Books of Trade Interest

THE CHEMISTRY OF DYESTUFFS, by M. Fort, M. Sc. (Leeds), Lecturer in Dyeing in the Bradford Technical College, and L. L. Lloyd, Ph. D. (Bern), Lecturer in Organic and Technical Chemistry in the Bradford Technical College. Cambridge University Press, London.

There is an interesting historical introduction to the "Chemistry of Dyestuffs," which puts the reader in position to understand the situation in the textile and dyestuffs industries when the war began. A chapter on tar distillation gives the elementary instruction needed by the student who has only a general idea of the sources of crudes and intermediates. The methods for the preparation of intermediate compounds are then introduced with a chapter on nitro products. Amido compounds, sulphonlic acids, the halogens, phenolic compounds including amido-phenols are treated with considerable detail. There is a chapter on quinones, another on oxidation and on the aldehydes and sulphur compounds, following which the diazo preparations are explained.

The dyer will find valuable basic suggestions in the chapter on the application of dyestuffs. The dyes are grouped into acid, basic, mordant, direct cotton and vat dyes and each group is discussed separately. After brief consideration of color and constitution, the various groups are taken up in detail and the chemical reactions explained. Natural dyestuffs form the subject of the closing chapter. The scheme of treatment adopted is that of the elementary textbook and the work is of especial value to students. In the use of terms the authors are clear and explicit, making it easy for the general reader as well as the student to obtain a comprehensive idea of the subject, although a knowledge of organic chemistry would be necessary to fully understand the processes described.

### FORMOSA'S OPIUM CROP

When Japan annexed the island of Formosa, many of the native Chinese were addicted to the use of opium in the proportion of about 60,000 males and 10,000 females. An act was promulgated making opium a Government monopoly and all addicted to the drug were obliged to obtain licenses. The opium is distributed to wholesale and retail dealers. In 1900 there were 152,950 males licensed and 12,802 females. In 1916 there were 57,829 males and 9,000 females.

The monopoly bureau obtains its raw product from India, Persia, and Turkey. Since the war there have been no importations from Turkey, the greater part (all in 1916) being purchased from Persia. Only about 25 acres are devoted to opium poppy cultivation in Taiwan. Opium powder is obtained by the monopoly bureau from the sanitary bureau of the Home Office of Japan. The opium manufactured by the Taiwan Monopoly Bureau is divided into two grades (formerly three, but since 1907 there has been no demand for the so-called second grade), the present prices being 28 yen (normal exchange value of yen is \$0.4985) for first grade and 20 yen for third grade per tin containing 100 momme (about 13 ounces) of opium paste.

At first the proportion of demand among consumers was 10, 20, and 70 for the first, second, and third grades, respectively, but gradually the best grade increased in demand, the present proportion of sale being about 92 for first grade and 8 for second. Those who give up smoking are invariably the ones who are least addicted to the drug. With increased use of the higher-priced quality the revenue derived from the opium monopoly actually shows an increase. The director states that no opium is exported from Taiwan. The revenue in 1916 was \$3,070,485.

### AUSTRALIAN INDUSTRIES MAY COMBINE

The Australian Government has under consideration a proposal that manufacturers and merchants form associations to co-operate with government bureaus to strengthen themselves in markets at home and abroad after the war.

It is proposed that the cost of the organization shall be borne partly by the commonwealth and partly by the industries benefited, says *Printers Ink*. There is to be no interference with the individual producer or manufacturer. He may, if he thinks fit, ignore the recommendations or refuse to be aided. The main features are covered under the following five sub-divisions:

(1) The units of the scheme will be associations representing each industry, composed of all the producers or manufacturers of an industry forming themselves into an association.

(2) There will be a general council of commerce and industry, composed of representatives from the various associations.

(3) There will be a department of commerce and industry, and a minister of commerce and industry. A first-class business man will be appointed as permanent head of this department. There will be joined with him other experts, representing primary and secondary industries.

(4) The science and industry bureau (existing advisory council), placed on a permanent basis and thoroughly equipped and staffed, will be an integral part of the organization, and at the disposal of the department of commerce and industry, and of the various industrial associations.

(5) Trade representatives will be appointed in the principal overseas markets.

### NEW LABOR RULE IN NEW JERSEY

Beginning on July 1, every worker seeking employment in the industries of New Jersey, will be required to present a card from the State, Federal and Municipal Employment Bureau, showing where he was last employed and for what reason his employment ceased. This is one of the features of a plan by which New Jersey hopes to solve the problem of the shortage of labor in all industries, incident to the war, which is jointly announced by Colonel Lewis T. Bryant, Commissioner of Labor of New Jersey and by Warren C. King, president of the Manufacturers' Council of the State of New Jersey, which organization, acting with the Commissioner of Labor worked out the details of a labor program for New Jersey which it is hoped will pave the way for similar action by other States and by the Federal government.

### Foreign Trade Opportunities

26879—A man in Spain is in the market for complete installation of machinery for the manufacture of castor oil, the plant to have a capacity of 10,000 kilos of seed per day of 10 hours. Payment will be made by confirmed credit in Spain. Correspondence should be in Spanish. Reference.

26883—An agency is desired by a man in Australia for the sale of chemicals, such as soda ash, caustic soda, potassium chlorate, ferro silicon, etc. American firms should state amount of subsidies and commissions allowed, if cabling costs are paid by them, and whether they are prepared to make offers of parcels as opportunities arise. Reference.

26890—An agency is desired by a man in Italy for the sale of carbonates of soda, caustic soda, silicate of soda, pharmaceutical products, vegetable and animal oils and fats, lubricating oil, and oil seeds. Payment will be made by confirmed credit in American bank. Correspondence should be in Italian or French. Reference.

26891—A French firm in England wishes to purchase soap. It is also prepared to accept an agency proposition. The firm desires this soap for the French markets. Correspondence may be in English. Reference.

## The Foreign Markets

### LONDON BUYERS FLOCK TO THE AUCTIONS

#### Damaged Goods Eagerly Purchased at Reduced Prices —Benzoin, Dragon's Blood and Kola Scarce and Higher—Price Changes This Week

(Special Cable to DRUG & CHEMICAL MARKETS)

London, May 7.—The recent drug auctions were quite fairly supplied and buyers came forward freely, while values remained steady for the most part. A few parcels moved off in buyers' favor, notably Cape Aloes at 3s per cwt. lower. Cardamoms which before the war went regularly from here to Germany have been hanging fire for some time and a nice selection is now available at reasonable rates.

Rhubarb is flat. Sennas are unchanged. Ipecac Rio is steady but buyers have helped themselves to some parcels of damaged goods just arrived which were offered cheap. Sumatra benzoin is wanting. Siam fetches high prices and dragons blood continues scarce, especially the reboiled grade. Kola is moving upward. In the chemical market, which is very quiet, the only feature is English camphor which has been again advanced 3d per pound.

Aloin is higher; also cream of tartar, saccharin, chloral hydrate, sodium phosphate, lead acetate.

There is a firmer tendency in tartaric acid and citric acid.

Bleaching powder, honey, potassium bromide and quinine are easier. It is understood in London that the Netherlands Government will control quinine exports by a licensing system which is an improvement over conditions first reported when it was announced that an absolute embargo had been placed on cinchona bark, quinine, and tin.

Agar agar and sodium acetate are lower.

The next drug auctions will be held on Thursday, May 9.

### JAVA'S EXPORTS IN 1917

According to latest statistics available, the following were among the exports from Java and Madoera during 1916 and 1917:

Article—	Unit	1916	1917
Paraffin .....	ton	3,477	3,674
Groundnuts, shelled .....	ton	5,912	6,299
Groundnuts, unshelled .....	ton	2,623	3,657
Cocoa .....	ton	1,470	1,555
Coco .....	ton	387	179
Copra .....	ton	38,492	25,031
Gum Damar .....	ton	1,663	1,637
Cinchona bark .....	ton	8,412	3,118
Quinine .....	K. G.	114,573	131,508
Citronella oil .....	K. C.	434,964	515,763
Coconut oil .....	1,000 liters	10,826	27,724
Pepper, white .....	ton	1,339	2,371
Pepper, black .....	ton	7,999	9,868
Spirits .....	1,000 liters	17,691	5,092
Tin .....	ton	19,742	15,606

The great commercial difficulties of 1917 led to considerable decreases in the export of certain items, as copra, cinchona bark and tin. However, the large demand from the United States caused increases in ground nuts, cocoa, coconut and citronella oils and black pepper. Against a decreased export in copra stands an increase in coconut oil. By far the greater part of this oil went to America.

Although a direct cinchona trade between America and Java was established during 1917 and England also imported considerable quantities of the material, the great decrease of exports to the Netherlands, caused by the war conditions, was not offset.

### India's Indigo Output

In 1896, the year before the large-scale introduction of synthetic indigo, the export of natural indigo from India was 187,337 hundredweight (20,981,744 pounds), valued at £3,569,670 (\$17,371,800); whilst from Java in the same year 680,000 kilos (1,449,143 pounds) of a somewhat higher quality indigo (75 per cent.) were exported, having an approximate value, on the same basis as the Indian indigo, of £255,000 (\$1,240,960). Thus the combined exports of these two countries in 1896 had a value of £3,824,670 (\$18,612,760). This period might be termed the climax in the history of natural indigo which extends back to the earliest times, mummies of the Eighteenth Egyptian Dynasty (1580 B. C.) having been found wrapped in cloths dyed with indigo, says W. A. Davis, indigo research chemist to the Government of India.

The total world's output of indigo under pre-war conditions was valued at more than \$25,000,000. This value falls not far short of that of all other artificial organic dyes put together. The following table shows the German exports of dyes (Germany before the war supplied six-sevenths of the world's requirements in artificial organic dyes):

Dyes	1880 Tons	1890 Tons	1895 Tons	1900 Tons	1905 Tons	1907 Tons	1909 Tons
Aniline .....	2,141	7,280	15,789	23,781	36,570	43,716	47,777
Alizarin .....	5,588	7,906	8,928	8,591	9,339	10,500	34,784

Up to the year 1896 the advance in the prosperity of the Indian indigo industry had been almost phenomenal during a century. But the advent of the Badische process brought about a rapid and steady decline, until in 1914 only about one-twentieth the quantity made in 1896 was manufactured.

As regards the area under indigo in India in 1895, 1,688,042 acres were devoted to this crop; in 1914, before the war, the area had shrunk to less than 150,000 acres. In 1880 India contained 2,800 indigo factories and 6,000 small works employing primitive methods of extraction, the total number of persons employed, exclusive of agricultural laborers, being 360,000. In 1911 only 121 factories remained (112 being worked by steam power) and the total number of workers had fallen to 30,795.

The year 1916-17 area under indigo in India was three and one-half times the average for the preceding five years, but the total (756,400 acres) was still less than half that occupied by this crop in 1895 (1,688,042 acres).

China and Japan consumed in 1913 27,081 tons of indigo (20 per cent. paste), whereas the total consumption of Great Britain, British Dominions, and the United States of America combined was only 6,179 tons.

The rapid capture of the Chinese market by synthetic indigo in the course of about 7 years is seen from the fact that in 1906, when Germany exported indigo of a total value of 31,600,000 marks (\$7,520,800), Japan was the principal consumer with 6,900,000 marks (\$1,642,200) whilst China imported only to the value of 5,300,000 marks (\$1,261,400). In 1913, of the German export of the total value of 53,000,000 marks (\$12,614,000), China consumed indigo of the value of 21,250,000 (\$5,057,500) and Japan 4,100,000 (\$975,800).

A cablegram from the American consul at Padang, Sumatra, received April 22, states that the Government has prohibited the exportation of cinchona bark, quinine salts, tin, tin ore, and kapok.

## Notes on New York Imports

The General Bakelite Co. is credited with importations of 52,600 gallons of cresylic acid.

Lasker & Bernstein are credited with an importation of over 2,500 pounds of sponges.

T. W. Duche & Sons received an importation of 130,000 pounds of gum arabic during the week.

About 43,000 gallons of cresylic acid, which arrived from abroad was consigned to W. E. Jordon.

About 100 pounds of atropine sulphate was among the importations of drugs consigned to Merck & Co.

Imports of vanilla beans included 3,600 pounds by Dodge & Olcott Co., and 3,400 pounds by Thurston & Braidich.

Chas. Pfizer & Co. imported crude tartar aggregating over 32,600 pounds. The Tartar Chemical Co. imported 48,000 pounds.

Some 9,750 pounds of caraway seed, which arrived last week from the Far East, was consigned to A. Stallman & Co.

Essential oils of various descriptions amounting to 9,000 pounds were received by G. Lueders & Co., E. Fougera & Co., and Cia Morana.

### BENZOL AS A MOTOR FUEL

The Paris Compagnie Generale des Voitures, which controls most of the taxicabs of Paris, has discovered that a very suitable mixture for motor cars can be obtained by 50 per cent. alcohol, 25 per cent. benzol and 25 per cent. gasoline. The benzol will dissolve both the alcohol and the gasoline. It is estimated that 22,000,000 gallons of alcohol and 15,000,000 gallons of benzol will be available annually.

Before the war, France produced comparatively little benzol, and although this fuel was used exclusively by Paris taxicabs, most of it was imported from Germany and from England. Since 1914 the gas companies have been obliged to extract the benzol from the coal treated by them. Before the war France imported 66,000,000 gallons of gasoline, most of this coming from America.

### AMERICAN CHAMBER IN SPAIN

The American Chamber of Commerce for Spain, with headquarters in Barcelona, has now begun active work. Its officers are: President P. J. Brewer, general manager in Spain of the Westinghouse Co.; vice presidents, H. Harrsen, general manager of the Ebro Irrigation & Power Co.; and H. Van Tress, agent in Spain of the United States Steel Products Co.; honorary secretary, E. M. Smith, manager in Spain of the Allied Machinery Co.; treasurer, J. C. Mares, of the firm of Carlos Mares, general agent in Spain of the Scott Browne Co. The American Chamber for Spain at the present time has a total of 80 members, of whom 40 are Americans and American firms.

Two shipments of morphine by exporters, who received orders from the Far East were held up by the Government's action in prohibiting the exportation of morphine during the war. The shipments are said to have amounted to 100,000 ounces. Manufacturers of pharmaceuticals, who have Government contracts have been unable to obtain sufficient supplies to fill the orders.

### EMBARGOES HURT CANADIAN DRUGGISTS

Wholesale Houses Unable to Fill Orders—Only 30 Items Out of 120 Obtainable by Government Permission—Manufacturers Short of Crude Materials

(Special to DRUG AND CHEMICAL MARKETS)

Toronto, Canada, May 7.—Conditions in the wholesale drug trade of Canada are very unsatisfactory on account of the difficulty of obtaining supplies by reason of embargoes, delayed deliveries and the constant increase in prices. Owing to the heavy demand for drugs from the British and allied governments the market is most uncertain, and wholesalers are reluctant to carry adequate stocks purchased at the present unprecedented prices fearing a heavy loss in case of a drop which may occur at any time. Some essential lines, including mercury, caustic soda and quinine are reported as being practically off the market. Orders from abroad have been held up for several months, especially in the case of shipments from Great Britain, owing to the strictness of the British export regulations.

T. E. O'Reilly, of T. E. O'Reilly, Ltd., chemical brokers, said the general situation of the drug and chemical trade was critical. It was more or less demoralized, owing to the uncertainty as to what products the United States would license for shipment into Canada. Large proportions of the approved drugs and chemicals are imported, hence the Canadian trade is at present largely dependent on the attitude of the American government. His company is the Canadian representative of eight large American houses, all of which do an extensive business in Canada, but owing to the present restrictions and the refusal of licenses covering various materials, this business has been much curtailed. Canadian manufacturers, also, are seriously affected. A large number of contracts were booked in the fall of 1917 for this year's requirements, previous to the regulations, and thus it can be seen what effect this would have on Canadian business in general, owing to the inability of the buyers to procure these goods elsewhere. So far as known these regulations were impartially enforced, no favors being known. Among the industries injuriously affected were the drug and pharmaceutical manufacturers, packing houses and rubber companies.

There was, Mr. O'Reilly continued, absolutely no desire on their part or that of their customers to obtain materials that were of vital necessity for the prosecution of the war. But co-operation between the United States and Canada to permit the importation of such materials as could be supplied without detriment to the allied cause appeared to be badly lacking. There were many instances where licenses had been granted on certain materials, but only after long delays and sometimes where two or three items were required the license for only one would be given, which might be useless without the others. Of 120 items on their list there were only about 30 which could be supplied after government permission had been obtained and a license granted.

### ENEMY IMPORTS FURTHER RESTRICTED

The Treasury Department has notified the collectors of the regulations which have just been issued to all American consuls. Beginning May 15 imports must be accompanied with a certificate by the consul stating that there has been no enemy interest in the merchandise presented for entry. Carrying out these requirements, the Treasury has called upon the collectors for co-operation. This scheme of regulating imports has been devised at the suggestion of the War Trade Board in whose hands the duty has been imposed of restricting trade in enemy goods.

## Color & Dyestuff Markets

### SPOT STOCKS LIMITED, BUSINESS LIGHT

#### Importers Find It Difficult to Get New Supplies— High Prices Restrict Trading—Benzol Neglected— Toluol Scarce—Intermediates Firm

Price changes have been of minor importance. The market has been quiet and business largely of a routine character. There is no indication of a material weakening for the reason that importers continue to have trouble in getting stocks from primary points, and despite the lack of interest in trading at this time, the majority of holders of spot stocks are quoting firmly at previous levels, and with the exception of a sharp advance on aniline oil the general condition is about the same as it was a week ago.

Of the dye bases and dyewoods cube gambier and imported albumen are the outstanding features. The supply of these two materials is hardly sufficient to handle the business that is being placed and importers say there is nothing to indicate any immediate improvement in the situation. Cochineal, cutch, divi, all fustic, indigo and the various grades of logwood are in sufficient inquiry to lead holders to the belief that there will be considerable activity in the near future, and in view of the underlying strength importers are not inclined to do a great deal of shading for stocks in quantity.

There is little new to be said of the coal tar crudes. Benzol continues to be neglected and the range of prices is still wide. There are large quantities of stocks on hand and with few inquiries, holders are quoting at lower prices than have been heard in this market for a long time. Naphthalene is steady but not particularly active and in some quarters lower figures prevail. Fair quantities of phenol have been offered in the open market at lower prices, but the consumer demand is not pressing at this time. Toluol continues in scant supply, and at the high price, little interest is shown.

In the list of intermediates slightly lower figures have been named, but it is understood that these prices governed only small, odd lots, as for the most part stocks in quantity are held firmly. H acid is in better demand, but on account of fair quantities of spot, prices have not advanced. Naphthionic and sulphuric acids continue quiet. The export demand for aniline oil has caused a tight condition on this product.

Benzolate of soda, benzidine, para-amidophenol, ortho toluidine and the other important intermediates have been in good inquiry, but the movement of stocks has been slow. Dimethylaniline continues scarce and prices are at high levels with stocks on spot insufficient to take care of the consumer call. There is also a large export demand for para-phenylenediamine developing and prices may advance in view of light supplies.

#### Dye Bases and Dyewoods

**Albumen**—Although there has been an improvement in arrivals of stocks of albumen from the Orient, they have not been large enough to cover all orders and prices in some quarters are quoted nominal. The demand for all grades continues heavy. Where quotations were available they ranged from \$1.05 to \$1.10 a pound for the Chinese egg; 90c. @ 95c. a pound for the imported blood, and from 55c. to 60c. a pound for the domestic blood.

**Cochineal**—The inquiry for cochineal is particularly active at this time, but trading has not been especially

heavy. Stocks on spot are not abundant and there is little reason to believe that prices could be materially shaded. The silver Teneriffe is quoted in most quarters at 54½c. @ 56c. a pound; the rosy black 55½c. @ 59c. a pound according to quantity, and the gray black 54½c. @ 55½c. a pound. Small quantities of the Madras variety have arrived during the week, but these stocks went into immediate consumption and did not reach the open market.

**Cutch**—All cutch has ruled quiet during the interval, but prices are firm and unchanged at 18¾c. @ 19c. a pound for the Rangoon in boxes, with stocks for delivery quoted in most quarters at 16c. @ 17½c. a pound. Wide price ranges of 12c. to 15c. a pound have been heard on the extract, and this condition is said to be due to considerable dealer speculation.

**Divi Divi**—Stocks of divi divi continue to reach this market from primary points, but importers are not inclined to lower prices in view of the strong inquiry. It is not learned that there is any large accumulation of stocks in this market, but supplies on hand are sufficiently large to handle more business. From \$66 to \$76 a ton were the figures heard at the close.

**Fustic**—In quantity for spot and over the month prices are \$39 to \$49 a ton for the sticks; \$35 to \$38 a ton for the young roots; 6½c. to 7½c. a pound for the chips; 24½c. @ 25½c. a pound for the solid, and 13c. to 15c. a pound for the 51-degree liquid. The New York fustic market closed steady at the above prices despite the fact that buying is not heavy. There is a good inquiry from the majority of users and some talk of Government buying.

**Gambier**—For spot and nearby stocks of the common gambier sellers are quoting 23½c. to 25¾c. a pound, and from 20c. to 21c. a pound for the plantation kind. A tight condition is still reported in this market on all gambier and the cubes are practically out of the market. The demand is exceptionally heavy and some importers are booked far ahead. For the most part trading has been confined to small quantities. It is reported that some stocks are nearby but it is not probable that these materials will reach the open market.

**Indigo**—Closing figures were \$2.75 @ \$3.00 a pound for the Oudes; \$2.50 @ \$3.00 a pound for the Bengal; \$2.75 @ \$2.90 a pound for the Guatemala; \$1.10 @ \$1.40 a pound for the Madras, and 54c. to 56c. a pound for the paste. The New York market has not been especially active and with supplies ample to take care of more business it is thought that shading could be done on firm bids.

**Logwood**—For the logwood sticks the price is unchanged at \$35 @ \$40 a ton. The chips are in fairly good demand at 2½c. @ 3½c. a pound. Solid logwood was quoted at 19c. @ 25c. a pound, according to quality, and the 51-degree twaddle at 10½c. @ 11½c. a pound. Because of light supplies and a heavy demand for the crystals there has been an advance in price to 20c. @ 25c. a pound. Arrivals of the sticks and chips have been comparatively heavy recently, but importers are holding prices firmly at previous levels in view of consumer interest on forward positions.

#### Coal-Tar Crudes

**Benzol**—The inside price for spot benzol was 30c. a gallon, which is the lowest figure named for this material in a long time. Some sellers are still holding at 32c. a gallon for spot in view of a slightly better

inquiry. The market is weak and there is nothing at this writing to indicate any improvement. Large quantities of spot material are available here and some report that a reliable buyer could get stocks at his own price.

**Naphthalene**—The demand for naphthalene flake is not especially strong at this time as large users are apparently sufficiently supplied with stocks to take care of their immediate needs. In car lots the price for prime stocks has been in the neighborhood of 11c. a pound, and in some quarters prompt material was quoted at 10½c. a pound. There is a steady demand for naphthalene balls and with supplies on spot comparatively light it is not thought that 12½c. a pound could be materially shaded.

**Phenol**—Offerings of phenol have been made comparatively freely during the week and prices for spot and nearby stocks have ranged from 52c. a pound, and up, drums included. There is not a great deal of buying interest, as users consider the present prices too high despite the fact that the above quotation is a decline of 1½c. a pound from the figure named a week ago. While spot stocks in the open market are not large they are sufficient to take care of all the business being placed.

**Toluol**—There has not been much trading in toluol. Supplies on spot have been hard to locate, but where material has been offered the price has ranged from \$5.75 to \$6.00 a gallon, and only in instances where users are hard pressed for supplies will they pay this price.

#### Intermediates

**Acid H**—A slightly better demand has been noted on H acid and prices have ranged from \$2.30 a pound up. In view of this improvement some holders of spot materials have asked as high as \$2.50 a pound, but sales have passed at the inside figure. Supplies on hand are still sufficient to take care of more business.

**Acid, Naphthionic**—A quiet condition has prevailed on this acid and prices are easier at \$1.35 @ \$1.45 a pound for the refined, and \$1.10 to \$1.20 a pound for the crude. On firm bids there is every reason to believe that the above prices could be shaded in view of the fact that there are fairly large stocks available in the open market.

**Acid, Sulphanilic**—Little interest is being manifested among users of sulphanilic acid, and prices are weak at 30c. @ 32c. a pound for the crude and 42c. to 44c. a pound for the refined. In view of the lull in this material that has now lasted for several weeks the majority of makers have curtailed their production. The inquiry has been fairly active, but no large orders have developed.

**Aniline Oil and Salts**—Prices were decidedly firm at the close at 28c. a pound, drums included, for the oil, and 26½c. a pound, drums extra. The salts was quoted at 31c. @ 32c. a pound, according to quantity. The export demand is especially strong and there are indications that prices will hold firm in view of the heavy buying interest and light spot supplies.

**Benzoate of Soda**—The market is steady on benzoate of soda, but not particularly active. Prices for spot soda have ranged from \$3.90 to \$4.00 a pound, which are approximately the same figures named for this material a week ago. The acid is in good inquiry and spot is quoted at \$4.00 @ \$4.25 a pound. Supplies are not abundant, but apparently sufficient to handle more business.

**Benzidine**—The demand has been steady and with supplies comparatively light holders are not inclined to do a great deal of shading, regardless of buyer or

quantity. The base is quoted at \$1.75 @ \$1.85 a pound, and the sulphate at \$1.40 @ \$1.50 a pound.

**Dimethylaniline**—Not in some time has this item been in such scant supply and holders of spot material are quoting with the same firmness that was noted a week ago at 67c. @ 70c. a pound. The consumer call is especially heavy, and in some quarters factors are quoting prices nominal.

**Para-Amidophenol**—No important price change has been reported on this material. There is not a great deal of activity and the base is now available in the spot market at \$3.75 @ \$4.00 a pound, while the hydrochloride could be had at \$4.10 @ \$4.25 a pound.

**Ortho-Toluidine**—From \$1.25 to \$1.35 a pound are the prices heard for the spot ortho-toluidine, and \$2.25 to \$2.35 a pound are the prevailing prices for the para-toluidine. The market has been quiet during the interval insofar as buying is concerned, but there is an active inquiry for both grades.

## Dyestuff Notes

The Federal Aniline Corporation, dealing in chemicals at 440 Fourth avenue, has assigned for the benefit of creditors to Max Rosenfeld. It was incorporated in 1917 with a capital stock of \$10,000. Emil Schaub is president of the corporation.

The Government has some 50,000,000 pieces including caps, trousers, coats, and blankets to be cleaned and dyed and the work will be given to dye establishments in different sections of the country. Inspectors will supervise the work for the Government.

Dr. S. W. McCallie, state geologist of Georgia, reports the discovery of an important deposit of organic asphaltum containing the organic matter from which certain grades of German dyes are made. The deposit was first discovered in a Georgia swamp, and Dr. McCallie says it is sufficiently large and easily accessible to justify an immediate commercial development to extract and market the dyes. It has been believed that the only deposit of this mineral in the United States was in Florida. The latest discovery is considered more extensive than the Florida deposit, in better position for mining, and it has easier access to the market.

In an address at a Liberty Loan meeting in Spokane, April 22, W. C. Redfield, Secretary of Commerce said: "The war has taught the American business men that the cheapest dyes are not always the best. The textile men of America did not stand back of struggling plants which were trying to start the industry here because the American prices were a little higher, but if their patriotism had been as far reaching as their economic vision we would have had a good industry here when the war broke out. They paid three times over for their lack of support the first year of the war and were glad to get the American product at the advanced prices."

## MAY CLOSE BUTTERWORTH-JUDSON PLANT

Mayor Gillen, of Newark, N. J., has issued orders to the Health Department to close the plant of the Butterworth-Judson Corporation, owing to the fumes emitted in making picric acid under Government contract. The company has just placed a contract for a stack to contain apparatus to absorb the fumes. The decision of the Mayor to have the plant closed follows an edict issued several weeks ago, in which Mayor gave the company until May 6 to comply with the order.

## Heavy Chemical Markets

### LULL IN DEMAND FOR CHEMICALS

#### Acids Still Scarce and Prices Nominal—Bleaching Powder Weak—Market for Alums Strong—Aluminum Sulphate Lower—Little Interest in Sodas

Taking the local heavy chemical market as a whole there has been no outstanding feature during the week, unless it has been the lack of buying interest. Caustic soda and soda ash have ruled unusually quiet and wide price ranges have been heard. There appears to be absolutely no interest in these two items and at the close there was a continued downward trend in prices. Some of the heavy acids have been offered more liberally but for the most part supplies are scant and trading has been limited to the quantity of spot material available.

Where sales have passed on the 28 per cent. acetic acid prices have been higher than have been known in the New York market for a long time. A sharp advance has been noted in the spot price of the 56 per cent. acetic, and in view of no offerings on the 70 and 80 per cent. test, prices continue nominal. The glacial variety is also nominal. Of the various tests of muriatic acid the 22-degree test is the only material that has been available in reasonable quantities. It is stated in reliable quarters that the lower tests are practically unavailable at this time in view of the Government's call for the higher tests, and it is only occasionally that any quantity reaches the open market. There have been small scattering sales of the various tests of nitric. Pyrite acid is entirely out of the spot market, and whatever trading has been noted on sulphuric has been on 66 degree brimstone, and prices are unusually high.

Nothing new has been reported on any of the alums, and if anything the market is slightly easier. Aluminum sulphate has ruled comparatively quiet during the interval. Bleaching powder is weak.

**Acid, Acetic**—The demand for acetic acid is strong. Where sales have passed in the open market only small quantities have been involved. The glacial is nominal at 38c. to 39c. a pound. Small quantities of the 28 per cent. test have been quoted at 15½c. to 16c. a pound. For the 56 per cent. test prices have ranged from 27½c. to 28c. a pound. There has been no trading on the 70 or 80 per cent. acetic acid. The requirements of the Government are so large that practically the bulk of acetic is going in that direction.

**Acid, Muriatic**—The Government continues to absorb the bulk of the production and although plants are working overtime, it appears that little material is reaching the open market. Where prices were obtainable they were at 2c. @ 2½c. a pound for the 18 degree; 2½c. @ 3c. a pound for the 20 degree, and from 2¾c. to 3½c. a pound for the 22 degree material.

**Acid, Nitric**—Only small quantities of any tests of nitric acid have been offered on the open market during the week. The demand is unusually heavy at this time, and it is only in cases where users are in urgent need of supplies that the Government will make releases. The only stocks that have passed to consumers have been the 40 degree, which was quoted at 8½c. @ 9½c. a pound, and the 42 degree which has held tightly at 9½c. @ 9¾c. a pound.

**Acid, Sulphuric**—Pyrite material is entirely out of the local market and quotations are nominal. There

have been fair quantities of the 66 degree brimstone available in the New York market during the week and prices have ranged from \$35 to \$40 a ton. Oleum was available at \$65 to \$70 a ton. Prices have been nominal on battery acid due to the scant spot supplies. All sulphuric is in heavy demand from consumers everywhere, but as with the other acids the Government continues to take such large quantities that makers are unable to meet the outside demand and take care of the Government's requirements at the same time.

**Alums**—Closing prices were 4½c. @ 5c. a pound for the ammonium lump; 9c. @ 10c. a pound for the potassium lump; 20¾c. @ 21½c. a pound for the potassium chrome, and 18½c. @ 19½c. a pound for the ammonium chrome. All of the above grades of alums have been moving slowly in the spot market, but owing to a steady inquiry the market is strong.

**Aluminum Sulphate**—Prices are slightly lower this week on aluminum sulphate, and trading has been chiefly of a routine character. From 3½c. to 4c. a pound has been the prevailing price for the high test, while the low test, or commercial grade is held at 2½c. @ 2½c. a pound. Supplies, while not abundant appear to be sufficient to take care of more business.

**Bleaching Powder**—Bleaching powder has been neglected by the majority of users and prices are easy. For stocks in export drums 2½c. a pound is the price named although in some directions ¾c. higher is heard. From 2c. to 2½c. a pound is the prevailing price for domestic drums. Large manufacturers have curtailed their production and there has been no great accumulation of stocks despite the lull in trading.

**Copper Sulphate**—A number of the larger factors in the New York market continue to quote 9c. @ 9½c. a pound for the 98-99 per cent. material, with second hands quoting at 8½c. @ 8¾c. a pound. Supplies on hand are not large, but are apparently sufficient to take care of more business at this time. Because of a large number of inquiries there is considerable underlying strength to the situation.

**Lead Acetate**—Supplies of acetate of lead in the spot market are not particularly large, and in view of the many inquiries that are being received holders are not inclined to do a great deal of shading regardless of quantity or buyer. Closing prices were firm at 15½c. @ 16½c. a pound for the brown sugar; 17½c. @ 17½c. a pound for the white crystals; 16c. @ 16½c. a pound for the broken cakes, and 17½c. @ 18½c. a pound for the granulated.

**Potash, Caustic**—Prices for the high test material range from 83½c. to 84c. a pound, on spot, while the low test is quoted at 63c. @ 63½c. a pound. The demand is fair, but by no means pressing and it is stated that supplies on hand are large enough to take care of more business.

**Potassium Prussiate**—The domestic material is firm at \$1.18 @ \$1.25 a pound for the yellow, and \$2.85 @ \$2.95 a pound for the red. Supplies are light at this time as there has been heavy buying in this market for several weeks. The Japanese material is now practically nominal as little stocks are arriving from the Orient.

**Soda Ash**—Following in sympathy with the lull in the New York market on caustic soda, soda ash has ruled unusually quiet, and late at the close it appeared

that a reliable buyer could name his own price. In the majority of instances sellers of spot barrels were quoting at prices that ranged from \$2.80 to \$3.00 per hundred pounds, while bags were quoted at \$2.40 to \$2.50 per hundred pounds, with no large transactions noted.

**Soda, Caustic**—Wide price ranges have been heard because of the unsettled condition. A sale of one car was reported at the close. There were offers from reliable brokerage houses at \$4.50 per hundred pounds dock, and \$4.60 to \$4.70 store. From Philadelphia there were offers from the rail at \$4.40 per hundred pounds. Over the balance of the year one of the important producers was quoting at \$4.80 on contract work.

**Sodium Nitrate**—It is reported that the Government has advised certain firms that have been re-selling material that if the practice continues they will be restricted in their requirements later on, and as a result of this the resale material has eased off, and there have been rumors during the week of private sales as low as \$5.00 per hundred pounds. A consumer, pending further official advice from Washington, is inclined to buy such material only when actually forced to do so. From \$5.50 @ \$5.75 has also been heard in the local market during the week.

#### BRAZIL'S CALCIUM CARBIDE OUTPUT

Some interesting facts were recently presented by the board of trustees of the Companhia Brazileira Carbureto de Calcio at a stockholders' meeting of this Brazilian corporation. The company maintains a calcium carbide factory at Palmyra, State of Minas Geraes, which was operated continuously during 1917, save for a few interruptions arising from a shortage of electric carbons and iron sheets, the latter being used in the manufacture of drums. For other materials, such as coke and lime, prices almost double those paid formerly have obliged the company to increase the selling price of its product.

In 1917 the company's sales of calcium carbide aggregated 70,042 drums of 50 kilos (kilo=2,204 pounds) each and 5,235 drums of 75 kilos each, or 3,894,725 kilos in all, as compared with 3,050,080 kilos in 1916 and 2,507,730 kilos in 1915. The heavy overhead charges, which so frequently burden domestic industries are shown by the fact that freight and cartage amounted to 277,399 milreis (about \$69,349 in American currency), or more than 10 per cent. of the gross sales.

Not only have the products of this company found an increasing sale in Brazil but exports have been made to Argentina and Uruguay. The profits of the company during the past year have enabled it to call in 6 per cent. of the bond issue outstanding.

#### STATUS OF THE MINERALS BILL

A bill passed the House recently, giving the President control over the production of minerals, ores and metals required in the prosecution of the war, including such minerals, metals, intermediate products and chemical compounds as antimony, arsenic, bismuth, bromine, magnesite, manganese, mercury, mica, potassium, sulphur, etc. The House reduced the appropriation from \$50,000,000 to \$10,000,000 and struck out the provision authorizing the President to fix the prices of the articles covered by the bill. Arthur E. Wells, acid expert of the Bureau of Mines, informed the Senate Committee that production will not be equal to the explosives programme of the United States by the end of the year. He favored price guaranteeing for two years on pyrites to increase production.

#### NEW PLANT OF THE LAMBERT COMPANY

The Lambert Chemical Co., St. Louis, will build a plant at Lake Charles, La., for manufacturing sodium nitrate and sulphur products.

## In The Chemical Field

It is reported that the People's Gas Light & Coke Co. of Chicago, has discovered a process for making toluol from low grade bituminous coal.

**The Butterworth-Judson Corporation**, Newark, N. J., has taken out a building permit for the construction of a new one-story brick and steel absorption tower at its plant on Roanoke Avenue, to be erected for the purpose of carrying off the fumes from the plant. The estimated cost of the structure is \$30,000.

Owing to the impossibility of obtaining supplies, the Brazilian Government has just published a decree offering financial assistance to establish caustic-soda factories, loaning up to 75 per cent. of cost of construction, the amounts not to exceed \$500,000 for each of the first three factories with minimum production of 500 tons per year.

Reports reaching the Department of Commerce show that the exports of nitrate of soda from Chile do not yield the amount of potash that they should produce, with scientific methods employed. At least 30,000 tons of potash are contained in the 3,000,000 tons of nitrate of soda that are exported from Chile annually and by a proper method of extraction for potash, 300,000 tons of potash could be recovered.

The United States Government is said to be considering the construction of a large new plant at New Haven, Conn., to be located at the works of the New Haven Gas Light Company on East Chapel Street, for the production of toluol from the gas manufactured by the New Haven company. The gas will be "washed" to extract the benzol, which product will then be refined, producing toluol. The new plant is estimated to cost in the neighborhood of \$100,000.

Directors of the Dow Chemical Co. have declared a regular quarterly dividend of 1 1/4 per cent. on the common stock and an extra of 6 1/4 per cent. payable May 15 to stockholders of record May 5. This is the same rate that the company has been paying, 32 per cent. a year. At the present price on the Cleveland Exchange, 197, the stock yields on the current dividend 16 per cent. The officials deny the report that the plant is to be taken over by the Government for war work.

#### T. F. O'KEEFE WITH FRANK HEMINGWAY

Thomas F. O'Keefe, formerly connected with the Textile Department of E. F. Drew & Co., Inc., 50 Broad street, New York City, has accepted the position as general sales manager of Frank Hemingway, Inc., 115 Broadway, New York. Prior to his connections with E. F. Drew & Co., Mr. O'Keefe was for two years in the Textile Department of Marden, Orth & Hastings Corp., 61 Broadway, New York.

#### CHEMICAL PLANT TO COST \$600,000

The Union Chemical Company, 503 Union Building, Cleveland, O., has had preliminary plans prepared for the construction of a large new chemical plant to be located at Lorain. It is said the works will consist of about sixteen buildings, one and two-story, and the project is estimated to cost \$600,000.

#### TAKES OVER CENTURY'S BUSINESS

The business of the Century Colors Corporation, with the selling staff of that company, has been consolidated with the business of the National Aniline and Chemical Company, 21 Burling Slip, New York.

# The Drug & Chemical Markets

## NEW HIGH LEVELS IN DRUGS AND CHEMICALS

**Cinchona Bark, Numerous Roots, Flowers and Herbs**  
**Higher**—Santonin, Tartaric Acid, Tin Oxide, Seidlitz Mixture Advanced—Codeine and Morphine Lower

Prices of drugs and pharmaceutical chemicals ruled strong and new high levels were established. Declines were not numerous. Codeine was reduced 75 cents an ounce and morphine \$1. Cinchona bark red quills are higher. Gentian and St. Vincent arrowroot were advanced. The chief development among flowers was a sharp gain of \$1.25 a pound for Valencia saffron. Berries of all descriptions closed firm, but without notable change. Mustard seed is scarcer. Cumin seed closed easier. Cannabis true imported leaves scored a gain of 40c. a pound and pulsatilla leaves 50c. a pound. Medicinal gums are strong, owing to scant stocks. Essential oils ruled firm, with sharp rises in erigeron and synthetic rose oil. Oleoresin cubeb advanced 50c. a pound. There were advances in santonin, tartaric acid, tin oxide, seidlitz mixture and rochelle salts.

## PRICES CHANGES IN NEW YORK (Original Packages)

### Advanced

Arrow Root, St. Vincent, 3c	Oil of Thyme, 15c
Cannabis Leaves, True, Imported, 40c	Oleoresin, Cubeb, 50c
Cinchona Bark, Red Quills, 10c	Pepper Black, Singapore, 34c
Cream of Tartar, U. S. P., 3c	Pepper, White, Singapore, 1c
Dragon's Blood, Reeds, 55c	Rochelle Salts, 2c
Menthol, Japanese, 55c	Saffron, Valencia, \$1.25
Moss, Irish, 4c	Santonin, \$1.60 @ \$2.75
Oil of Erigeron, 25c	Seidlitz Mixture, 2c
Oil of Rose, Synthetic, \$2	Strychnine, 10c
Tin Oxide, 5c	Tartaric Acid, U.S.P., 2c

### Declined

Acetphenetidin, 25c	Colchicum Seed, 15c
Celery Seed, 3/4c	Mercury, Flasks, \$2.50
Chillies, Japanese, 1c	Morphine, 1c
Codeine, 75c	Pulsatilla Leaves, 50c

**Acetphenetidin**—An accumulation of supplies, due to increased production, caused prices to be lowered 25c. to \$3.75 @ \$4.25 a pound.

**Arrow-Root, St. Vincent**—Inquiries are more active and owing to short supplies and stronger primary markets, holders raised prices 3c. to 28c. @ 30c. a pound.

**Berberis Aquifolium Leaves**—The market has stiffened, owing to smaller stocks. Holders advanced quotations 3c. to 19c. @ 21c. a pound.

**Cascara Bark**—Confirmed reports received from the coast that bark supplies are practically cleaned up, created a bullish sentiment among leading holders who raised prices 1/2c. to 14 1/2c. @ 17 1/2c. a pound.

**Cloves**—Active inquiries from all quarters resulted in supplies being quickly cleaned up. With poor prospects of further arrivals, prices are gradually rising, closing at 57c. @ 58c. for Amboynas and 46 1/2c. @ 47c. a pound for Zanzibars.

**Cinchona Bark, Red Quills**—Leading importers advanced prices 10c. to \$1.10 @ \$1.45 a pound, but the demand was less urgent owing to reports from Holland of a modification in the export embargo on bark from the Dutch East Indies. It is said that the United States has agreed to make certain shipments of commodities to Holland in exchange.

**Codeine**—At the close of the market manufacturers lowered prices 75c. to \$7.25 an ounce for sulphate in bulk.

**Colchicum Seed**—Prices eased off 15c. to \$3.70 @ \$3.80 a pound in response to larger offerings by leading importers.

**Cream of Tartar**—Manufacturers raised prices 3c. to 62c. for U. S. P. crystals and to 62 1/2c. a pound for powdered. Second hands reported sales at 65c. a pound. A rising market for the crude material forced prices up.

**Dragon's Blood**—Scant stocks resulted in a sharp advance of 55c. to \$4.70 @ \$4.80 a pound in reeds.

**Gentian Root**—There was a further advance of 1/2c. to 16c. @ 16 1/2c. for the whole root and 18 1/2c. @ 20 1/2c. a pound for powdered root.

**Glycerin, Dynamite**—Prices closed easier in response to reports of offerings at 64c., owing to a slow demand. Quotations were nominally at 64c. @ 65c. a pound, drums included.

**Larkspur Leaves**—Limited offers, owing to recent light arrivals gave strength to the market. Prices closed 3c. higher at 26c. @ 30c. a pound.

**Mace**—The demand continues good and with stocks nearly depleted, prices are moving upward closing 2c. higher for Banda No. 1, 54c. @ 55c. a pound.

**Menthol**—In most quarters prices were raised 5c. to \$3.35 @ \$3.40 a pound. Scattered lots were offered at \$3.30 and were quickly absorbed.

**Mercury**—Light inquiries and keener competition resulted in leading selling agents announcing a cut of \$2.50 per flask to \$11.75.

**Morphine**—The weak and lower market for opium led to a decline of \$1. to \$11.80 an ounce for acetate and sulphate supplies, in bulk.

**Moss, Irish**—Owing to restrictions on imports, the demand became more active and prices closed 4c. higher at 15c. a pound. Some odd parcels could have been purchased at 14c. a pound.

**Mustard Seed**—All grades are scarcer and decidedly stronger. Holders are asking 1/2c. higher. California Trieste brown seed is 17 1/2c. @ 18c. a pound. Sales have been limited to small parcels because of light stocks.

**Nutmegs**—Supplies are scarce and prices continue to stiffen, closing 1c. higher at 33c. @ 34c. for 110s to the pound for Singapore nuts.

**Opium**—Further arrivals weakened the market. Importers quoted \$23.75 for U. S. P. supplies in cases, \$25 for powdered, and \$26 a pound for granular.

**Quinine**—The market for sulphate supplies in second hands is unsettled because of larger offerings at \$1.05 an ounce, although \$1.75 was named by some holders. Parcels of Java sulphate recently traded in were below U. S. P. standard, which brought forth considerable criticism in trade circles. Makers continue to quote 75c. an ounce for sulphate in lots of 100 ounces.

**Rochelle Salts**—Manufacturers advanced quotations 2c. to 43 1/2c. a pound for crystals in boxes and to 43c. a pound for powdered in barrels.

**Saffron Flowers, Valencia**—Owing to lack of shipments from primary markets, prices here were driven

upward, the market closing at \$14.75 @ \$15 a pound. Holders are not urging sales under present uncertain conditions.

**Sage, Greek, Stemless**—The market closed stronger under a broader demand from consumers. Leading importers raised prices 1c. to 29c. @ 30c. a pound.

**Santonin**—Small stocks and larger inquiries resulted in leading interests announcing an advance to \$38. a pound for U. S. P. crystals and \$37.75 a pound for powdered supplies.

**Seidlitz Mixture**—Manufacturers advanced quotations 2c. to 33½c. a pound in bbls. The rise was due to a stronger market for the crude material.

**Strychnine**—Makers raised prices on all salts 10c. a pound, based on the advance in *nux vomica*. Sellers are quoting on the basis of \$1.55 an ounce for alkaloid crystals.

**Tartaric Acid, U. S. P.**—In response to the stronger position of the crude material, manufacturers advanced prices again 2c. to 82½c. for granular and powdered and to 83c. a pound for crystals.

**Thyme Oil**—Cable advices from Spain quoting higher prices, equivalent to \$2 a pound laid down here, led to handlers announcing an advance on spot lots of 15c. to \$1.90 @ \$2.10 a pound, as to brand.

**Tin Oxide**—In sympathy with the higher price of tin, makers of the oxide put up quotations 5c. to 80c. a pound for 500 lb. barrel lots.

#### VEGETABLE OIL INDUSTRY GROWS

The Philippine Vegetable Oil Company is erecting a number of large receiving and storage tanks at Japan and Townsend streets, San Francisco, Cal., and will construct a pipe line from these to Pier 38. A great increase is noted in the shipment of vegetable oils to this port from the Orient and tank steamers will be employed as quickly as they can be made ready in order to do away with the present system of shipping in drums. The oil will be pumped from the steamers to the storage tanks and then into tank cars for shipment across the continent.

The principal vegetable oils for which a wide demand has been created by the war are soya bean oil, copra oil, palm oil, castor oil, linseed oil, peanut oil, cottonseed oil, corn oil and olive oil. Plants have been established on the Pacific Coast for crushing copra and beans for oil, and olive oil plants will be used this season for the manufacture of castor oil. Three years ago the oil of the soya bean was almost unknown here but during the past year nearly 200,000 tons were imported from the Orient through Pacific Coast ports.

#### SPICES, SEEDS AND HERBS HIGH

John Clarke & Co., say of seeds, herbs and spices: "The market shows a smaller total of trading, because neither buyers nor sellers are inclined to make a move, except in a sporadic or irregular way. This shrinkage in activity is due partly, perhaps, largely to the recent notable activity in the absorption by grinders and distributors from first hands, which depleted the first-hand supply to such an extent that there is not nearly so much left to operate upon."

"But the fever and unsettlement of the past three or four months is unabated; there is not the least chance of even an approximate return to normality of trading, or of supply, or of demand. And in view of the possibilities involved in the next ninety days in Europe, as well as the constant possibilities that face American markets in the way of Governmental restriction and regulation including both domestic trade functions and those of export and import, it is perhaps as far as any conservative observer may decently go, to say that America is in for an era of high prices for spices, seeds and herbs."

## Drug & Chemical Notes

Boston is said to be practically without a supply of syrup of buckthorn. One Boston druggist said he had gone the round of the wholesalers and was unable to secure any.

The shipments of camphor from Japan, last year, amounted to 3,119,915 kin. The United States received 1,493,135 kin against 2,654,438 kin in 1916, and 1,035,263 kin in 1915.

B. M. Moses has sold his interest in the Omega Chemical Company, New York, of which he has been secretary and treasurer for nineteen years. He says his intention is to buy a newspaper and elevate mankind by administering ideas instead of liniment.

The O-Sel-o Company, Fort Wayne, Ind., has been incorporated with a capital of \$60,000 to engage in the manufacture of medicines, chemicals, etc. G. H. Heine, J. H. Miller, G. A. Dehm, C. H. Allgeier, James Heliotes, W. A. Young, and Dr. R. B. Shields are the principal incorporators.

Massachusetts wholesale druggists are at their wits' end for small wooden boxes in which to ship their manufactured goods. One of the largest manufactories of this kind has been taken over by the Government and others in the business are sending out notices that their prices have been increased and will be subject to further increase without notice. The supply of paper boxes is also short and manufacturing druggists are in doubt what they will do for a substitute.

#### CUT IN SUGAR EFFECTIVE MAY 15

The United States Food Administration has ordered the curtailment of sugar supplies used by manufacturers except in the case of manufacturers of essential food products. The ruling limits firms to 80 per cent. of their normal supply and is retroactive to Jan. 1, 1918. It becomes effective May 15.

A cut to 50 per cent. of normal will be ordered in the cases of firms which have been established or expanded between November, 1917, and April, 1918, in the face of an actual sugar shortage. Those who entered the business since April, 1918, or since the United States declared war, will be cut off entirely.

The so-called nonessentials that will be limited include confectioneries and soft drinks of every description; but the food administration does not believe the action will mean any cut in production. The use of glucose and saccharine is expected to make up the difference.

The essentials that will not be limited in their use of sugar are:

Some preservers and packers of vegetables, catsup and chili sauce, fruits and milk, manufacturers of jam, jelly and preserves, tobacco and preserves, apple butter and glycerine, ice cream, not including sherbets and water ices, druggists, for medicine, and producers of honey.

Ice cream is put in the preferred class to assure consumption of surplus milk supplies and thus encourage dairy interests to maintain production. Tobacco was placed in this class largely because the amount of sugar used by tobacconists is almost negligible, the chief source of sweets being molasses.

Manufacturers are required to report the amount of sugar they held on January 1, 1917, and receipts from that date until July 1. Subtracting the amount on hand July 1 will give the total consumption for the first six months of 1917. They must also report stocks on hand January 1, 1918, and receipts since that date,

# Prices Current of Drugs & Chemicals, Heavy Chemicals & Dyestuffs in Original Packages

**NOTICE** — The prices herein quoted are for large lots in Original Packages as usually Purchased by Manufacturers and Jobbers.

In view of the scarcity of some items subscribers are advised that quotations on such articles are merely nominal, and not always an indication that supplies are to be had at the prices named.

## Drugs and Chemicals

Acetanilid, C.P., bbls. bulk	lb.	.80	—	.81
Acetone	lb.	.35	—	.36
Acetphenetidin	lb.	3.75	—	4.25
*Aconitine, $\frac{1}{4}$ -oz. vials	ea.	—	—	—
Agar Agar, See Isinglass.	lb.	—	—	—
No. 1	lb.	.62	—	.63
No. 2	lb.	.56	—	.57
No. 3	lb.	.50	—	.51
Alcohol 188 proof	gal.	—	—	4.93
190 proof, U.S.P.	gal.	—	—	4.95
Cologne Spirit, 190 proof	gal.	—	—	5.00
Wood, ref. 95 p.c.	gal.	90%	—	.92
97 p.c.	gal.	93%	—	.94
Denatured, 180 proof	gal.	68	—	.69
188 proof	gal.	.69	—	.70
Aldehyde	lb.	1.25	—	1.45
Almonds, bitter	lb.	.40	—	.44
Sweet	lb.	.27	—	.29
Meal	lb.	.34	—	.35
Aloin, U. S. P., powd.	lb.	.90	—	.95
Aluminum (see Heavy Chemicals)	lb.	—	—	—
Ambergris, black	oz.	10.00	—	14.00
Grey	oz.	24.00	—	27.00
Ammonium, Acetate, cryst.	lb.	.80	—	.85
Benzoate, cryst., U. S. P.	lb.	—	—	11.00
Bichromate, C. P.	bulk	—	—	1.20
Bromide, gran., bulk	lb.	.75	—	.76
Carb. Dom., U.S. kegs, powd.	lb.	.12	—	12 $\frac{1}{4}$
Hypophosphite	lb.	—	—	2.15
Iodide	lb.	—	—	4.20
Molybdate, Pure	lb.	—	—	7.00
Muriate, C. P.	lb.	—	—	.45
Nitrate, cryst., C. P.	lb.	.28	—	.26
Gran.	lb.	—	—	.54
Oxalate, Pure	lb.	—	—	1.15
Per sulphate	lb.	—	—	1.25
Phosphate (Dibasic)	lb.	.50	—	.60
Salicylate	bulk	1.60	—	1.63
Amyl Acetate, bulk, drums, gal.	lb.	5.50	—	5.70
Antimony Chlor. (Sol. butter of Antimony)	lb.	.18	—	.20
Needle powder	lb.	.13	—	.14
Sulphate, 16-17 per cent. free sulphur	lb.	.35	—	.72
Antipyrine, bulk	lb.	20.00	—	21.50
Apomorphine Hydrochloride	oz.	—	—	31.20
Areca Nuts	lb.	.36	—	.37
Powdered	lb.	.31	—	.32
Argols	lb.	.16	—	.18
*Arsenic, red	lb.	.65	—	.66
White	lb.	.09 $\frac{1}{2}$	—	.10
Atropine, Alk. U.S.P., 1-oz. v. oz.	—	—	—	47.50
Sulphate, U.S.P., 1-oz. v. oz.	—	—	—	37.50
Balm of Gilead Buds	lb.	37.00	—	50.00
*Barium Carb. prec., pure	lb.	—	—	—
*Chlorate, pure	lb.	—	—	—
Bay Rum, Porto Rico	gal.	3.35	—	3.50
St. Thomas	gal.	3.80	—	4.00
Benzaldehyde (see bitter oil of almonds)	lb.	—	—	—
Benzol, See Coal Tar Crudes	—	—	—	—
Berberine, Sulphate, 1-oz. c.v. oz.	2.50	—	—	3.00
Beta Naphthol (see Intermediates)	—	—	—	—
Bismuth, Citrate U.S.P.	lb.	—	—	3.50
Salicylate	lb.	—	—	3.35
Subcarbonate, U.S.P.	lb.	—	—	3.50
Subgallate	lb.	—	—	3.50
Subiodide	lb.	—	—	5.60
Subnitrate	lb.	—	—	3.30
Tannate	lb.	—	—	3.15
Nominal.	lb.	—	—	—

## WHERE TO BUY

### SODIUM SULPHIDE FUSED & CRYSTALS ACETANILIDE, U.S.P. SPOT DELIVERY

### CAREX CO. 309 Broadway, N.Y.C.

Borax, in bbls., crystals	lb.	.07 $\frac{1}{4}$	—	.08 $\frac{1}{4}$
Crystals, U.S.P., Kegs	lb.	.08 $\frac{1}{4}$	—	.09
Bromine, tech., bulk	lb.	.75	—	.76
Burgundy Pitch	lb.	.04 $\frac{1}{2}$	—	.05
*Imported	lb.	—	—	—
Cadmium Bromide, crystals	lb.	4.20	—	4.25
Iodide	lb.	—	—	4.40
Metal sticks	lb.	1.90	—	1.95
Caffeine, alkaloid, bulk	lb.	12.50	—	13.50
Hydrobromide	lb.	10.70	—	12.00
Citrated, U.S.P.	lb.	8.00	—	8.05
Phosphate	lb.	14.00	—	15.00
Sulphate	lb.	15.00	—	16.00
Calcium Glycerophosphate	lb.	1.85	—	1.90
Hypophosphite, 100 lbs.	lb.	1.00	—	1.05
Iodide	lb.	—	—	4.10
Phosphate, Precip.	lb.	.34	—	.35
Sulphocarbohydrate	lb.	—	—	1.40
Calomel, see Mercury	—	—	—	—
Camphor, Am. ref'd	bbls., bk. lb.	—	—	1.11 $\frac{1}{2}$
Square of 4 ounces	lb.	—	—	1.12 $\frac{1}{2}$
16's in 1-lb. carton	lb.	—	—	1.15
24's in 1-lb. cartons	lb.	—	—	1.15 $\frac{1}{2}$
32's in 1-lb. carton	lb.	—	—	1.15
Cases of 100 blocks	lb.	—	—	1.12
Japan, refined, 2 $\frac{1}{2}$ -lb. slabs	lb.	1.11	—	1.12
Monobromated, bulk	lb.	3.50	—	3.60
Cantharides, Chinese	lb.	.95	—	1.00
Powdered	lb.	1.20	—	1.25
Russian	lb.	4.25	—	4.50
Powdered	lb.	.31	—	.32
Carbon disulphide, tech 500 lbs.	lb.	.08 $\frac{1}{4}$	—	.09
Casein, C. P.	lb.	.44	—	.47
Cerium Oxalate	lb.	.60	—	.62
Chalk, prec. light, English	lb.	.04 $\frac{1}{2}$	—	.04 $\frac{1}{2}$
Heavy	lb.	.03 $\frac{1}{4}$	—	.05
Chloral Hydrate, U. S. P. crystals, bottles incl'd.	lb.	—	—	1.43
100 lb. lots	lb.	—	—	1.43
Charcoal Willow, powdered	lb.	.04	—	.04 $\frac{1}{2}$
Wood, powdered	lb.	.06	—	.07
Chlorine, liquid	lb.	.15	—	.23
Chloroform, drums	lb.	.63	—	.65
Chrysarobin, U. S. P.	lb.	6.25	—	6.45
Cinchonidin, Alk.	oz.	—	—	.94
Cinchonine, Alk., crystals	oz.	—	—	.51
Sulphate	oz.	—	—	.35
Cinnabar	lb.	—	—	1.45
Civet	oz.	2.50	—	2.70
Cobalt, pow'd (Fly Poison)	lb.	.45	—	.49
Oleate	oz.	.85	—	.96
Cocaine, Hydroch. gran.	oz.	—	—	10.00
cryst., bulk	oz.	—	—	10.25
Cocoa Butter, bulk	lb.	.36	—	.37
Cases, fingers	lb.	.37	—	.39
Codine, Alk., Bulk	oz.	—	—	9.25
Nitrate, Bulk	oz.	—	—	8.25
Phosphate, Bulk	oz.	—	—	6.75
Sulphate, Bulk	oz.	—	—	7.25
Colloidion, 1-lb. cans	lb.	.45	—	.46
Colocynth, Trieste, whole	lb.	.34	—	.37
Pulp, U.S.P.	lb.	.49	—	.50
Spanish Apples	lb.	.29	—	.34
Copper Chloride, pure cryst.	lb.	—	—	.70
Oleate, mass, 1-oz. jars	lb.	—	—	.70
20 p.c.	lb.	—	—	1.65
Croresol, Sublimate, see Mercury.	lb.	—	—	—
Cotton Soluble	lb.	.78	—	1.00
Coumarin, refined	lb.	27.50	—	28.75
Cream of Tartar, cryst. U.S.P.	lb.	—	—	.62
Powdered, 99 p.c.	lb.	—	—	6.25
Cresone, U.S.P.	lb.	1.85	—	1.95
*Carbonate	lb.	26.00	—	27.50
Cresol, U.S.P.	lb.	.18	—	.19
Cuttlefish Bones, Trieste	lb.	.41	—	.42
Jewelers' large	lb.	1.25	—	1.30
Small	lb.	—	—	1.25
Nominal.	lb.	—	—	—
Cuttlefish Bone, French	lb.	.36	—	.37
Dover's Powder, U.S.P.	lb.	2.80	—	3.00
Dragon's Blood, Mass.	lb.	.34	—	.39
Reeds	lb.	4.70	—	4.80
Emetine, Alk., 15 gr. vials	ea.	—	—	2.70
Hydrochloride, U.S.P.	lb.	—	—	1.90
Epsom Salts (see Mag. Sulph.)	lb.	.84	—	.89
Ergot, Russian	lb.	.84	—	.89
Spanish	lb.	—	—	—
Ether, U. S. P.	1900	lb.	—	.27
Washed	lb.	—	—	.32
Myrcaptol	lb.	1.34	—	1.40
Formaldehyde, Sol.	lb.	.19	—	.20
Gelatin, silver	lb.	1.30	—	1.39
*Gold	lb.	—	—	—
Glycerin, C. P., bulk	lb.	—	—	—
Drums and bbls. added	lb.	.65	—	.66
C.P. in cans	lb.	.66 $\frac{1}{2}$	—	.67
Dynamite, drums included	lb.	.64	—	.65
Saponification, loose	lb.	.50	—	.50
Soap, Lye, loose	lb.	.45	—	.45
Grains of Paradise	lb.	2.50	—	2.75
Guaiacol, liquid	lb.	19.75	—	21.75
Guarana	lb.	1.00	—	1.05
*Haarlein Oil, bottles	lb.	7.45	—	8.00
Hexamethylenetetramine	lb.	1.05	—	1.15
Hops, N. Y., 1917 prime	lb.	.45	—	.50
Pacific Coast, 1917, Prime	lb.	.23	—	.24
Hydrogen Peroxide, U.S.P.	lb.	—	—	10 gr. lots
4-oz. bottles	—	—	—	gross
12-oz. bottles	—	—	—	gross
16-oz. bottles	—	—	—	gross
Hydroquinone	lb.	2.00	—	2.10
Ichthyol	lb.	—	—	—
Iodine, Resublimed	lb.	4.25	—	4.30
Iodoform, Powdered	lb.	—	—	5.00
Crystals	lb.	—	—	1.55
Iron Citrate, U.S.P.	lb.	—	—	1.00
Phosphate U.S.P.	lb.	—	—	.99
Pyrophosphate, U.S.P.	lb.	—	—	.99
Isinglass, American	lb.	.79	—	.80
Russian	lb.	4.45	—	4.55
See Agar Agar	—	—	—	—
Kamala, U. S. P.	lb.	3.20	—	3.25
Kola Nuts, West Indies	lb.	.15	—	.17
Lanolin, hydrous, cans	lb.	.39	—	.45
Anhydrous, cans	lb.	.49	—	.58
Lead Iodide, U.S.P.	lb.	—	—	2.95
Licorice, Mass., Syrian	lb.	.25	—	.29
*Sticks, bds.	lb.	.49	—	.50
Lupulin, U. S. P.	lb.	2.50	—	3.00
Lycopodium, U. S. P.	lb.	1.70	—	1.75
Magnesium Carbonate, kegs	lb.	.19	—	.20
Glycerophosphate	lb.	—	—	4.65
Hypophosphite	lb.	1.65	—	1.70
Iodide	lb.	—	—	4.85
Oxide, tins light	lb.	—	—	1.10
Peroxide, cans	lb.	—	—	2.15
Salicylate	lb.	1.30	—	1.37
Sulphate, Epsom Salts, tech	100-lbs.	3.37	—	3.45
U. S. P.	—	100-lbs.	3.62	—
Manganese Glycerophos	lb.	4.50	—	4.70
Hypophosphite	lb.	1.65	—	1.70
Iodide	lb.	—	—	4.85
Peroxide	lb.	.75	—	.80
Sulphate, crystals	lb.	.60	—	.67
Manna, large flake	lb.	.81	—	.84
Small flake	lb.	.64	—	.67
Menthol, Japanese	lb.	3.35	—	3.40
Mercury, flasks, 75 lbs.	ea.	—	—	117.50
Bisulphite	lb.	—	—	1.50
Blue Mass	lb.	—	—	.83
Powdered	lb.	—	—	.85
Blue Ointment, 30 p. c.	lb.	—	—	.86
50 p. c.	lb.	—	—	1.18
Calomel, American	lb.	—	—	1.91
Corrosive Sublimate, cryst.	lb.	—	—	1.76
Powdered, Granular	lb.	—	—	1.71
Iodide, Green	lb.	—	—	4.10
Red	lb.	—	—	4.20
Yellow	lb.	—	—	4.10
Red Precipitate	lb.	—	—	2.10
Powdered	lb.	—	—	2.20
White Precipitate	lb.	—	—	2.20
Powdered	lb.	—	—	2.25

\*Nominal.

MAY 8, 1918]

## DRUG &amp; CHEMICAL MARKETS

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## Drugs &amp; Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Methylene Blue, medicinal	lb. 15.00	-17.00
Milk, powdered	lb. .16	-.19
Mirbane Oil, refined, drama	lb. .17 1/2	-.19%
Morphine, Acet. bulk	oz. —	-11.80
Sulphate, bulk	oz. —	-11.80
Diacetyl, Hydrochloride, 5-oz. cans	oz. —	-15.90
Ethyl, Hydrochloride, 1-oz. v.oz.	—	-18.05
Moss, Iceland	lb. —	.32
Irish	lb. —	.15
Musk, pods, Cab.	oz. 10.00	-10.50
Tonquin	oz. 22.00	-22.50
Grain Cab	oz. 18.50	-18.95
Tonquin	oz. 33.40	-34.00
Druggists	oz. —	—
Synthetic	lb. 29.75	-30.00
Naphthalene, See Coal Tar Products.	—	—
Nickel and Ammon. Sulphate	lb. —	.22
Sulphate	lb. .27	-.29
Novocain (See Procaine)	lb. —	—
Nux Vomica, whole	lb. .12	-.13
Powdered	lb. .17	-.18
*Opium, cases, U. S. P.	lb. —	-23.75
Granular	lb. —	-26.00
Powdered, U. S. P.	lb. —	-25.00
Oxgall, pur. U. S. P.	lb. 1.50	-1.55
Papin	lb. 3.95	-.40
Paraffin White Oil, U. S. P. gal.	gal. 10	3.60
Paris Green, kegs	lb. .43	-.44
Petrolatum, light amber bbls.	lb. .06	-.07
Cream White	lb. .09	-.10
Lily White	lb. .10	-.11
Snow White	lb. .13	-.14
Phenolphthalein	lb. 6.00	6.25
*Phosphorus, yellow	lb. —	—
Red	lb. 1.70	-.80
*Pilocarpine, Alk., 10 gr. v. gr.	lb. —	—
Piperin	lb. 13.00	-18.00
Poppy Heads	lb. .85	-.95
Potassium acetate	lb. 1.45	1.50
Bicarb.	lb. 1.20	1.40
Bisulphite	lb. .45	-.60
C. P.	lb. .75	-.85
Bromide, (bulk, gran.)	lb. 1.35	1.36
Chromate, crystals, yellow, tech. 1-lb. c. b. 10	lb. —	1.05
Citrate, bulk	lb. —	1.60
Glycerophosphate, bulk	oz. —	1.45
Hypophosphite, bulk	oz. 2.15	2.20
Iodide, bulk	lb. —	3.75
Lactophosphate	oz. —	.25
Permanganate, U. S. P.	lb. 3.50	3.60
Salicylate	lb. 2.90	2.95
Sulphate, C. P.	lb. 1.11	1.16
Tartrate, powdered	lb. 1.31	1.32
Procaine, oz. bottles 5 gr. bottles	lb. —	6.20
Quinine, Sulph. 100 oz. tins	oz. .75	—
50-oz. tins	oz. .75	—
25-oz. tins	oz. .76	—
5-oz. tins	oz. .77	—
1-oz. tins	oz. .80	—
Second Hands	oz. —	—
*Amsterdam	oz. —	—
*German	oz. —	—
*Java	lb. —	—
Quinidine Alk. crystals, tins	oz. .80	—
Sulphate, tins	oz. .40	—
Resorcin crystals, U. S. P.	lb. 8.50	9.00
Rochelli Salt, crystals, bxs.	lb. —	.43 1/2
Powdered, bbls.	lb. —	.43
Saccharin, U. S. P. soluble	lb. 20.50	21.00
U. S. P., Insoluble	lb. 21.50	22.00
Salicin, bulk	lb. 16.00	-17.00
Salol, U. S. P. bulk	lb. —	1.50
Sandalwood	lb. —	—
Ground	lb. —	—
Santonin, cryst., U. S. P.	lb. —	38.00
Powdered	lb. —	39.75
Scammony, resin	lb. —	—
Powdered	lb. —	—
Sedilitz Mixture, bbls.	lb. .33 1/2	.34
Silver Nitrate 500-oz. lots	oz. .61 1/4	—
Sap, Castile, white, pure	lb. .34	40
Marseilles, white	lb. .17	18
Green, pure	lb. .17	18
Ordinary	lb. .14	15
Soap, Castile, Mottled, pure	lb. .15	16
Ordinary	lb. .12	13
Sodium, Acetate, U. S. P. gran.	lb. .25	29
Bicarb. U. S. P. powd., bbls.	lb. .02 1/2	.03
Bromide, U. S. P. bulk	lb. .65	.66
Caedolite	oz. 2.50	3.50
Chlorate, U. S. P. 8th Rev. crystals, c. b. 10	lb. —	.50
Granular, c. b. 10	lb. —	.32
Citrate, U. S. P. cryst.	lb. —	.67
Granular, U. S. P.	lb. —	.77
Glycerophosphate, crystals	lb. 2.65	2.70
Hypophosphite, U. S. P.	lb. 1.10	1.15
Iodide, bulk	lb. —	3.90
Phosphate, U. S. P., gran.	lb. —	.13

**WHERE TO BUY**

**Antoine Chiris Co.**  
NEW YORK  
IMPORTERS & MANUFACTURERS  
ESSENTIAL OILS  
SYNTHETIC CHEMICALS

**Fritzsch Brothers**  
New York  
**ESSENTIAL - OILS**

Sodium Phosphate Recryst.	lb. .17	— 18
Dried	lb. .25	— 26
Salicylate, U. S. P.	lb. 1.10	— 1.20
Sulph. (Glauber's Salt)	lb. —	— 12
Tungstate	lb. —	—
Spermaceti, blocks	lb. .27	— 28
Spirit Ammonia, U. S. P.	lb. .45	— 55
Aromatic, U. S. P.	lb. .47	— 50
Nitrous Ether, U. S. P.	lb. .48	— 49
Ether Comp.	lb. —	— 1.65
Storax, liquid cases	lb. 3.60	— 4.60
Strontium Bromide, bulk	lb. .75	— 76
Iodide, bulk	lb. —	— 3.50
Nitrate	lb. .24	— 29
Salicylate, U. S. P.	lb. 1.25	— 30
Strychnine Alkld., cryst.	oz. —	— 1.55
Acetate	oz. —	— 1.55
Nitrate	oz. —	— 1.55
Sulphate, crystals, bulk	lb. —	— 20
Sugar of Milk, powdered	lb. .48	— 49
Sulphonial, 100 oz. lots	lb. 1.25	— 1.50
Sulphonethylmethane, U. S. P.	lb. 15.00	— 16.00
Sulphonmethane, U. S. P.	lb. 12.95	— 13.50
Sulphur, bbls.	lb. 100 lbs.	— 2.35
Flour com'l bags	lb. 100 lbs.	— 2.25
Flowers	lb. 100 lbs.	4.05
Tartaric Acid, U. S. P.	lb. —	—
Granular and Powd.	lb. —	— 82%
Crystals	lb. —	— 83
Tamarinds	lb. .07 1/2	— 08 1/2
Kegs	lb. .37 1/2	— 3.80
Tartar Emetic, U. S. P.	lb. .65	— 65%
Casks	lb. .70	— 70%
Terpin Hydrate	lb. .54	— 59
Thymol, crystals, U. S. P.	lb. 15.50	— 16.50
Iodide, U. S. P., bulk	lb. —	— 16.55
Tin, bichloride, bbls.	lb. —	—
Oxide, 500 lb. bbls.	lb. —	— 80
Toluol. See Coal Tar Crudes.	—	—
Turpentine, Venice, True	lb. 3.65	— 3.75
Artificial	lb. .06	— 07
Spirits, see Naval Stores.	—	—
Vanillin	oz. .75	— .80
Witch Hazel Ext., dble dist., bbl.	lb. 1.18	— 1.23
—	gal. 1.23	— 1.23
Zinc Carbonate	lb. .23	— 24
Chloride	lb. .16	— 17
Iodide, bulk	lb. —	— 4.00
Metallic, C. P.	lb. .45	— .75
Oxide, Powd. U. S. P., bbls.	lb. .41	— .44
<b>Acids</b>	—	—
Acetic, 56 p. c.	lb. .27 3/4	.28
*Glacial, 99 p. c. carboys	lb. .43	— .44
Acetyl-salicylic	lb. 2.50	— 2.75
*Benzoin, from gum	lb. —	—
ex toluol	lb. 4.25	— 4.50
Boric, cryst., bbls.	lb. .13 1/2	.15
Powdered, bbls.	lb. .13 1/2	.15
Butyric, Tech., 60 p. c.	lb. 1.45	— 1.55
Camphor	lb. 4.35	— 4.45
*Carbolic, crys., U. S. P., drs.	lb. .54	— .55
5-lb. bottles	lb. .62	— .63
50 to 100-lb. tins	lb. .57	— .59
Chromic, U. S. P.	lb. 1.25	— 1.50

\*Nominal.



## Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

	lb.	3.50	3.75		lb.	3.70	3.80		lb.	.084	.094
Belladonna	lb.	3.50	3.75	Colchicum	lb.	.39	.40	Soda, Ground	lb.	6.38	
Powdered	lb.	3.55	3.80	Conium	lb.	.39	.40	Aluminum chloride, liq.	lb.	.045	.05
Berberis, Aquifolium	lb.	.19	.21	Coriander, Bombay	lb.	14½	14½	Sulph., high grade	lb.	.031	.04
Bitter	lb.	.16	.18	Morocco	lb.	—	—	Low grade	lb.	.024	.02½
Beth	lb.	.16	.20	Mogador, unbleached	lb.	15½	15½	Ammonia, Anhydrous	lb.	—	.25
Blood	lb.	.17	.18	Cumin, Levant	lb.	.18	.18½	Ammonia Water, 26 deg., car. lb.	lb.	.054	.074
Blueflag	lb.	.27	.30	Malta	lb.	17½	.18	20 deg., carboys	lb.	.05	.054
Bryonia	lb.	.27	.30	Morocco	lb.	15½	.16	18 deg., carboys	lb.	.045	.05
Burdock, Imported	lb.	.19	.24	Dill	lb.	.21	.21½	16 deg., carboys	lb.	.04	.04
American	lb.	.16	.19	Fennel, French	lb.	.17	.17½	Ammonium chloride, U.S.P., lb.	lb.	.19	.22
Calamus, bleached	lb.	1.50	3.00	“German, small	lb.	—	—	Sal Ammoniac, gray	lb.	.174	.18
Unbleached, natural	lb.	.24	.26	“Romanian, small	lb.	—	—	Granulated, white	lb.	.17	.17½
Cohosh, black	lb.	.11	.13	Flax, whole	per bbl.	18.50	19.00	Lump	lb.	.174	.20
Blue	lb.	.40	.42	Ground	lb.	.084	.09	Sulphate, foreign	100 lbs.	.034	.04
Colebicum	lb.	2.35	2.50	Foenugreek	lb.	.14	.14½	Domestic	100 lbs.	.034	.04
Colombo, whole	lb.	.25	.30	Hemp, Manchurian	lb.	.06	.06	Antimony Salts, 75 p. c.	lb.	—	—
Comfrey	lb.	.20	.24	Russian	lb.	—	—	65 p. c.	lb.	—	—
Culver's	lb.	.15	.16	Job's Tears, white	lb.	.06	.07	47 p. c.	lb.	—	—
Cranebill see Geranium.				Larkspur	lb.	.26	.30	Blanc Fixe, dry	ton	.044	.045
Dandelion, English	lb.	.35	.40	Lobelia	lb.	.22	.24	Baum, chloride	ton	.66	.86
American	lb.	.32	.34	Mustard, Bari, Brown	lb.	—	—	Dioxide	lb.	.28	.30
Dogglass Dom-Rock Co.	lb.	.55	.75	Bombay, Brown	lb.	.15	.15½	Nitrate	lb.	.11½	.12
Cut Bermuda	lb.	.28	.32	California, brown	lb.	.17½	.18	Barytes, floated, white	ton	.30	.35
Echinacea	lb.	.30	.32	Dutch, yellow	lb.	.25	.25½	Off color	ton	.14	.18
Elecampane	lb.	.09	.10	English, yellow	lb.	—	—	Bleaching Powder, 35 p. c.	lb.	.024	.028
Galangal	lb.	.24	.26	“German, yellow	lb.	—	—	“Calcium Acetate, . . . . .	100 lbs.	.60	.65
Gelsemium	lb.	.08	.10	Parsley	lb.	.22	.24	Carbide	ton	.70	.73
Genitian	lb.	.16	.16½	Poppy, Dutch	lb.	—	—	Carbonate	lb.	—	—
Powdered	lb.	.18½	.20½	Russian, blue	lb.	—	—	Chloride, solid, f.o.b. N. Y.	ton	.24	.26
Geranium	lb.	.09	.10	Indian	lb.	.40	.41	Granulated, f.o.b. N. Y.	ton	.30	.34
Ginger, Jamaica, unbleached	lb.	1.54	.21	Rape, English	lb.	—	—	Solid, second hands	ton	.40	.45
Bleached	lb.	.25	.26	Japanese, small	lb.	.09½	.10	Gran. second hands	ton	.40	.45
Ginseng, Cultivated	lb.	3.00	.50	“Domestic	lb.	.10	.10½	Sulphate, 98-99 p. c.	lb.	.09	.09½
Wild, Eastern	lb.	10.00	12.00	Sabadilla	lb.	.13½	.14	Carbon tetrachloride	lb.	.15½	.16
Northwestern	lb.	15.00	18.00	“Strophanthus, Hispidus	lb.	1.60	.16½	Copper Carbonyl	lb.	.31	.35
Southern	lb.	12.00	15.00	Kombe	lb.	1.85	.19½	Subacetate (Verdigris)	lb.	.40	.42
Golden Seal	lb.	.53	.55	Sunflower, domestic	lb.	.07	.07½	Powdered	lb.	.09½	.09½
Powdered	lb.	.26	.29	South American	lb.	.06	.07	Sulphate, 98-99 p. c.	lb.	.09	.09
“Imported	lb.	.40	.44	Worm, American	lb.	.70	.78	Second hands	lb.	.084	.114
Ipecac, Cartagena	lb.	3.10	3.20	Levant	lb.	—	—	Powdered	lb.	.10½	.114
Powdered	lb.	3.40	.350	Cassia, Batavia, No. 1	lb.	.33	.34	Copperas, f.o.b. works	100 lbs.	.125	.130
Rio	lb.	3.10	3.25	China, Selected, bales	lb.	.19	.20	Fusel Oil, crude	gal.	.265	.275
Jalap, whole	lb.	.60	.65	Saigon, genuine	lb.	.57	.59	Refined	gal.	.375	.400
Powdered	lb.	.70	.75	Capsicum, African	lb.	.22	.23	Hydrofluoric, 30 p. c. in bbls.	lb.	—	.05
Kava Kava	lb.	.17½	.19	Japan	lb.	.15	.16	48 p. c. in carboys	lb.	—	.05
“Lady Slipper	lb.	.80	.90	Cassia Buds	lb.	.24	.26	52 p. c. in carboys	lb.	—	.10
Licorice, Russian, cut	lb.	.80	.90	Chillies, Japan	lb.	.18	.19	Lead, Acetate, brown sugar	lb.	.15½	.16½
Spanish natural, bales	lb.	.33	.35	Mombasa	lb.	.30	.31	White, cryst.	lb.	.17½	.17½
Selected	lb.	—	—	Cinnamon, Ceylon	lb.	.28	.32	Broken Cakes	lb.	.16	.16½
Powdered	lb.	35	.37	Cloves, Amboyna	lb.	.57	.58	Granulated	lb.	.17½	.18½
Lovage, American	lb.	.70	.75	Zanzibar	lb.	.45½	.47	Arsenate, powdered	lb.	.31	.34
Manaca	lb.	.25	.27	Ginger, African	lb.	.19	.20	Paste	lb.	.15	.17
Mandrake	lb.	.08	.09	Cochin “D”	lb.	.20	.21	Nitrate	lb.	.15	.17
Musk, Russian	lb.	2.25	2.40	Jamaica, white	lb.	.13½	.13½	Oxide, Litharge, Amer. pd. lb.	lb.	.09½	.09½
Orris, Florentine, bold	lb.	.26	.27	Japan	lb.	.54	.55	Red, American	lb.	.10	.10½
Verona	lb.	.19	.20	Mace, Banda, No. 1	lb.	.47	.48	Foreign	lb.	—	—
Finger	lb.	1.95	2.10	Batavia, No. 2	lb.	.54	.55	White, Basic Carb., Amer.	lb.	—	.09½
Pareira Brava	lb.	.35	.40	Pepper, black, Sing.	lb.	.33	.34	dry	lb.	—	.09½
Pellitory	lb.	.29	.31	White	lb.	.32	.33	in Oil, 100 lbs. or over	lb.	—	.10½
Pink, true	lb.	.42	.43	Pimento	lb.	.06	.06½	English	lb.	—	—
Fleuriss	lb.	.17	.19	WAXES	lb.	—	—	Basic Sulphate	lb.	.084	.084
Rhatany	lb.	.13	.15	Bees, white	lb.	.65	.67	Magnesite, f.o.b. Cal.	lb.	.420	.440
Rhubarb, Shensi	lb.	.80	.85	Yellow, crude	lb.	.42	.44	Magnesite, o. b. N. Y.	lb.	.65	.70
Cuts	lb.	.41	.45	Yellow, refined	lb.	.46	.48	Muriatic acid	lb.	.017½	.02½
High Dried	lb.	.50	.55	Candelilla	lb.	.60	.65	“18 deg. carboys	lb.	.02½	.03
Sarsaparilla, Honduras	lb.	.74	.78	Carnauba, Flor.	lb.	.90	.92	20 deg. carboys	lb.	.02½	.03½
American	lb.	.35	.40	No. 1	lb.	.85	.87	22 deg. carboys	lb.	.02½	.03½
Mexican	lb.	.58	.65	No. 2	lb.	.80	.82	Nitric acid, 36 deg. carboys	lb.	.07½	.07½
Seneca, Northern	lb.	.78	.88	No. 3	lb.	.21	.23	“38 deg. carboys	lb.	.07½	.07½
Southern	lb.	.90	.95	Ceresin, Yellow	lb.	.22	.25	“40 deg. carboys	lb.	.08½	.09½
Serpentaria	lb.	.45	.50	White	lb.	.20	.21	“42 deg. carboys	lb.	.09½	.09½
Skunk Cabbage	lb.	.17	.20	“Montan. crude	lb.	—	—	Aqua Fortis, 36 deg. car. lb.	lb.	.03½	.04
“Snake, Black	lb.	.34	.35	Substitute	lb.	.26	.28	38 deg. carboys	lb.	—	.03½
Canada natural	lb.	.34	.38	“Green	lb.	.65	.75	40 deg. carboys	lb.	—	.03½
Stripped	lb.	.45	.50	“Refined, white	lb.	.85	.95	42 deg. carboys	lb.	—	.03½
Spinach	lb.	.28	.30	“Domestic	lb.	.80	.85	Plaster of Paris	bb.	.150	.176
Squill, white	lb.	.13	.14	Refined, yellow	lb.	.88	.90	True Dental	bb.	.175	.200
Stillingia	lb.	.12	.14	Paraffin, refd 120 deg. m. p.	lb.	.70	.80	Potash Caustic, 88-92	lb.	.82½	.83½
Stone	lb.	.06	.07	Foreign, 130 deg. m. p.	lb.	.12½	.13	Potassium Bichromate	lb.	.44½	.44½
Turmeric, Aleppy	lb.	.07½	.08	Stearic Acid—	lb.	.14	.14½	Carbonate, calc.	lb.	.68	.75
China	lb.	.09	.09½	Single pressed	lb.	.22½	.23	Chlorate, cryst.	lb.	.39	.40
Madras	lb.	.10½	.10½	Double pressed	lb.	.24½	.25	Powdered	lb.	.36½	.40
Unicorn false (helonias)	lb.	.33	.35	Triple pressed	lb.	.28	.29	Muriate, basis 80c. per ton	350.00	.57.00	
True (Aletris)	lb.	.38	.40					Prussiate, red	lb.	.28½	.29½
Valerian, Belgian	lb.	1.20	1.30					Yellow	lb.	.18	.12½
“English	lb.	—	—					Salpitate, Granulated	lb.	.27½	.28½
“German	lb.	—	—					Refined	lb.	.31½	.31½
Japanese	lb.	1.15	1.20					Soda Ash 58 p. c. in bags	100 lbs.	.240	.250

## Heavy Chemicals

## Heavy Chemicals

## Drugs &amp; Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Sodium Nitrite	lb.	41 $\frac{1}{4}$	43%
Prussiate, Yellow	lb.	.51	.52
Silicate, 60 p.c.	lb.	42 $\frac{1}{2}$	5.00
Silicate, 40 p.c.	lb.	100 lbs.	2.25
Sulph., Glauber's salt	lb.	1.40	1.70
Sulphide, 60-62 p.c. cryst.	lb.	.06	.06 $\frac{1}{2}$
60 p.c. per 100 lbs.	lb.	42.25	4.50
Sulphur (crude) f.o.b. Baltimore	ton	45.00	50.00
Sulphur Acid	ton	45.00	50.00
60 deg. Pyrite	ton	45.00	50.00
60 deg. Brimstone	ton	35.00	40.00
Oleum	ton	65.00	70.00
Battery Acid, carper 100 lbs.	3.00	3.40	" Nominal.

## Dyestuffs, Tanning Materials and Accessories

## COAL-TAR CRUDES AND INTERMEDIATES

Acid Benzoic	lb.	4.00	4.25
*Acid Benzoic Crude	lb.	Nominal	
Acid H.	lb.	2.30	2.40
Acid Metanilic	lb.	—	—
Acid Naphthionic, Crude	lb.	1.10	1.20
Refined	lb.	1.35	1.45
Acid Sulphanilic, crude	lb.	.30	.32
Refined	lb.	.42	.44
p-Aminophenol Base	lb.	3.75	4.00
p-Aminophenol Hydrochloride	lb.	4.10	4.25
Aminozobenzene	lb.	1.75	1.85
Aniline Oil, druma extra	lb.	.26	.27
Aniline Salts	lb.	.31	.32
Aniline for red	lb.	1.15	1.20
*Anthracene (80 p.c.)	lb.	Nominal	
Anthraquinone	lb.	3.75	5.10
Benzaldehyde	lb.	5.10	5.75
Benzidine Base	lb.	1.85	2.00
Benzidine Sulphate	lb.	1.40	1.50
Benzoate of Soda	lb.	3.90	4.10
Benzol, C. P.	gal.	.30	.32
Benzol (90 p.c.)	gal.	.32	.32 $\frac{1}{2}$
Benzylchloride	lb.	2.25	2.50
Diamedophenol	lb.	6.50	7.00
e-Dianisidine	lb.	—	—
Dichlorbenzol	lb.	.35	.40
e-Dichlorbenzol	lb.	.15	.16
p-Dichlorbenzol	lb.	.13	.14
Diethylaniline	lb.	4.50	5.50
Dimethylaniline	lb.	.65	.67
Dinitrobenzol	lb.	.34	.36
m-Dinitrobenzene	lb.	.45	.50
Dinitrochlorbenzene	lb.	.50	.56
Dinitrochlorbenzol	lb.	.38	.40
Dinitronaphthalene	lb.	.44	.75
Dinitrophenol	lb.	.52	.56
*Dinitrotoluol	lb.	.59	.60
Diphenylamine	lb.	.90	1.05
Dioxynaphthalene	lb.	—	—
Hydrazobenzene	lb.	1.50	2.00
Induline	lb.	2.00	2.25
Methylantranquinone	lb.	—	—
Monodinitrochlorbenzol	lb.	.48	.52
Monoethylaniline	lb.	1.00	1.25
Naphthalene, flake	lb.	103 $\frac{1}{2}$	.11
Balls	lb.	124 $\frac{1}{2}$	.13 $\frac{1}{2}$
Naphthalenediamine	lb.	—	—
a-Naphthol	lb.	1.65	1.75
b-Naphthol, Technical	lb.	.65	.70
Sublimed	lb.	.88	.92
a-Naphthylamine	lb.	.58	.62
b-Naphthylamine	lb.	1.65	1.75
p-Nitraniline	lb.	1.25	1.30
Nitrobenzene	lb.	.20	.22
e-Nitrochlorbenzol	lb.	.50	.56
Nitronaphthalene	lb.	.44	.65
p-Nitrophenol	lb.	.80	2.00
p-Nitrotoluol	lb.	.45	1.75
Nitrotoluol	lb.	.55	.65
e-Nitrotoluol	lb.	.75	.80
m-Nitrophenol	lb.	1.15	1.25
Phenol	lb.	.52	.53
p-Phenylenediamine	lb.	3.50	4.00
Phthalic Anhydride	lb.	3.75	4.25
Pseudo-Cumol	lb.	—	—
Resorcin, crystals, U.S.P.	lb.	9.50	10.00
Resorcin, Technical	lb.	6.00	6.25
Tetranitromethylaniline	lb.	—	2.50
Tolidin	lb.	2.50	2.83
o-Toluidine	lb.	1.25	1.30
p-Toluidine	lb.	2.25	2.35
*Toluol, pure	gal.	5.75	6.00
Toluol, Commercial, 90 p.c. gal.	lb.	5.85	6.10
m-Toluylenediamine	lb.	1.70	1.75
Xylene, pure	gal.	1.00	1.25
Xylene, Com.	gal.	.35	.40
Xylo	gal.	.35	.50

## COAL-TAR COLORS

Acid Black	lb.	1.40	1.60
Acid Blue	lb.	2.00	2.50
Acid Brown	lb.	2.40	3.10
Acid Fuchsin	lb.	6.30	7.50

\* Nominal.

## DRUG &amp; CHEMICAL MARKETS

[MAY 8, 1918]

WHERE TO BUY	
E. F. DREW & CO., Inc.	
50 BROAD ST. NEW YORK	
Aniline Dyestuffs	
Dyewood Extracts	
Industrial Oils	
Chemicals	

## NATURAL DYESTUFFS

Anatto, fine	lb.	.33 $\frac{1}{4}$	.35
Seed	lb.	.11 $\frac{1}{2}$	.12 $\frac{1}{2}$
Carmine No. 40	lb.	4.25	4.75
Cochineal	lb.	.54 $\frac{1}{2}$	.57
Gambier, see tanning.			
Indigo, Bengal	lb.	2.50	3.00
Oudes	lb.	2.75	2.95
Guatemala	lb.	2.25	2.75
Kurpahs	lb.	2.75	3.00
Madras	lb.	1.10	1.40
Madder, Dutch	lb.	.27	.30
Nugalls, blue Aleppo	lb.	—	—
Chinese	lb.	.25	.35
Persian Berries	lb.	—	—
Quercitron Bark, see tanning.			
Sumac, see tanning.			
Chile	lb.	.09	.10 $\frac{1}{2}$
Turmeric, Madras	lb.	.10 $\frac{1}{2}$	.11 $\frac{1}{2}$
Aleppey	lb.	.13 $\frac{1}{2}$	.16 $\frac{1}{2}$
Pubna	lb.	.09 $\frac{1}{2}$	.10 $\frac{1}{2}$

## DYEWOODS

Barwood	lb.	—	—
Canwood, chips	ton	.17	.20
Fustic, sticks	ton	39.00	59.00
Hypernic, chips	lb.	.09	.10
Logwood Sticks	ton	36.00	38.00
Chips	lb.	.02 $\frac{1}{2}$	.03 $\frac{1}{2}$

Quercitron, see tanning.			
Red Saunders, chips	lb.	.15	.17
EXTRACTS			

Archil, double	lb.	.15	.17
Triple	lb.	.18	.20
Concentrated	lb.	.21	.23
Cutch, Mangrove, see tanning.			
Rangoon, boxes	lb.	.18 $\frac{1}{4}$	.20
Liquid	lb.	.11 $\frac{1}{4}$	.13 $\frac{1}{2}$
Tablet	lb.	.11 $\frac{1}{2}$	.13 $\frac{1}{2}$
Cudbear, French	lb.	—	—
English	lb.	.20	.26
Concentrated	lb.	.38	.40
Flavine	lb.	.100	.150
Fustic, Solid	lb.	.24 $\frac{1}{2}$	.26 $\frac{1}{2}$
Liquid, 51 deg.	lb.	.11 $\frac{1}{2}$	.13 $\frac{1}{2}$
Gall	lb.	—	—
Hematein Extract	lb.	.14	.18
*Hypernic, liquid	lb.	—	—
Indigo, natural for cotton	lb.	.50	.54
For wool	lb.	.30	.32
Indigotine, 100 p.c. pure	lb.	—	.50
Logwood, solid	lb.	.19	.25
Crystals	lb.	.20 $\frac{1}{2}$	.26
51 deg. Twaddle	lb.	.10 $\frac{1}{2}$	.11 $\frac{1}{2}$
Contact	lb.	.11 $\frac{1}{2}$	.12 $\frac{1}{2}$
Osage Orange—			
Powdered			
Paste	lb.	.06	.11
Persian Berries	lb.	—	—
Quebracho, see tanning			
Quercitron	lb.	.07	.07 $\frac{1}{2}$
Sumac, see tanning			

## MISCELLANEOUS DYESTUFFS AND ACCESSORIES

Albumen, Egg	lb.	1.05	1.10
Blood, imported	lb.	.85	.90
Domestic	lb.	.55	.60
Prussian Blue	lb.	.80	.90
Soluble	lb.	.95	1.00
Turkey Red Oil	lb.	.14	.16
Zinc Dust, prime heavy	lb.	.15 $\frac{1}{2}$	.16 $\frac{1}{2}$
RAW TANNING MATERIALS			
Algarobilla	ton	40.00	15.00
Divi Divi	ton	66.00	75.00
Hemlock Bark	ton	15.00	16.00
Mangrove, African, 38 p.c.	ton	60.00	62.00
Bark, S. A.	ton	45.00	50.00
*Myrobalans	ton	63.50	65.00
Oak Bark	ton	15.00	16.00
Ground	ton	—	17.50
Quercitron Bark No. 1	ton	28.00	31.00
No. 2	ton	20.00	25.00
Sumac, Sicily, 27 p.c.	ton	95.00	98.00
Virginia, 25 p.c.	ton	57.50	59.50
Valonia Cups	ton	—	—
Beard	ton	—	—
Wattle Bark	ton	62.00	64.00
TANNING EXTRACTS			
Chestnut, ordinary, 25 p.c. tan, bbls.	lb.	.024 $\frac{1}{2}$	.03 $\frac{1}{2}$
Clarified, 25 p.c. tan, bbls.	lb.	.03	.03 $\frac{1}{2}$
Crystals, ordinary	lb.	—	—
Clarified	lb.	—	—
Gambier, 25 p.c. tan	lb.	.09 $\frac{1}{2}$	.11 $\frac{1}{2}$
Common	lb.	.25	.28
Cubes, No. 1	lb.	.24 $\frac{1}{2}$	.28
*No. 2	lb.	.21	.21 $\frac{1}{2}$
Hemlock, 25 p.c. tan	lb.	.03 $\frac{1}{2}$	.04 $\frac{1}{2}$
Larch, 25 p.c. tan	lb.	.03	.03 $\frac{1}{2}$
Crystals, 50 p.c. tan	lb.	.06	.07
Mangrove, 55 p.c. tan	lb.	.08	.12
Liquid, 25 p.c. tan	lb.	.06	.08

\* Nominal.

## Drugs &amp; Chemicals, Heavy Chemicals and Dyestuffs in Original Packages.

Muskegon, 23-30 p.c. tan,	lb.	.0134	.0234
50 p.c. total solids	lb.	.0134	.0234
Myrobalans, liq., 23-25 p.c. tan	lb.	.06	.07
Solid, 25 p.c. tan	lb.	.10	.11
Oak Bark, liquid, 23-25 p.c. tan	lb.	.0334	.0434
Querbracho, liquid, 35 p.c. tan	lb.	.0534	.0634
treated	lb.	.0534	.0634
35 p.c. tan, untreated	lb.	—	—
35 p.c. tan, bleaching	lb.	.0734	.08
Solid, 65 p.c. tan, ordinary	lb.	.1134	.1434
Clarified	lb.	.10	.12
Sapote, liquid, 20 p.c. tan,	lb.	—	—
50 p.c. total solids	lb.	.01	.0134
Smac, liquid, 25 p.c. tan	lb.	.07	.1034
Valonia, solid, 65 p.c. tan	lb.	Nominal	—

## Oils

## ANIMAL AND FISH

(Carloads)

Cod Newfoundland	gal.	1.26	— 1.27
*Domestic, prime	gal.	—	—
Liver, Newfoundland	bbi.	95.00	— 96.00
Norwegian	bbi.	140.00	— 145.00
*Dories, American	lb.	.25	.27
*English	lb.	.26	.28
German	lb.	—	—
Neutral	lb.	—	—
Horse	lb.	.17	.18
Lard, prime winter	gal.	2.30	— 2.35
Off prime	gal.	1.85	.190
Extra, No. 1	gal.	1.50	.155
No. 1	gal.	1.45	.150
No. 2	gal.	1.40	.145
Menhaden, Light, strained	gal.	1.16	.118
Yellow, bleached	gal.	1.18	.120
White, bleached, winter	gal.	1.20	.122
*Northern, crude	gal.	—	—
*Southern, crude, f. o. b. plant	gal.	1.00	.105
Neatsfoot, 20 deg.	gal.	—	3.25
30 deg. cold test	gal.	—	3.00
40 deg. cold test	gal.	2.95	— 3.00
Dark	gal.	1.75	.180
Prime	gal.	2.00	— 2.25
Oleo Oil	lb.	.22	.24
*Porpoise, body	gal.	.80	.85
Jaw	gal.	24.00	— 25.00
Red (Crude Oleic Acid)	lb.	.17	.175
Sandwich	lb.	.17	.175
Soda Oil	lb.	.11	.12
*Sperm, bleached winter	gal.	—	2.25
38 deg. cold test	gal.	—	2.25
45 deg. cold test	gal.	—	2.20
Natural winter, 38 deg., cold	gal.	—	2.25
test	gal.	2.20	— 2.25
Stearic, single pressed	lb.	.23	.24
Double pressed	lb.	.24	.25
*Triple pressed	lb.	.27	.28
Tallow, acidless	gal.	1.60	— 1.65
*Prime	gal.	1.55	— 1.60
*Whale, natural	gal.	1.20	— 1.25
Bleached, winter	gal.	1.30	— 1.35

## VEGETABLE OILS

*Castor, No. 1 bbls.	lb.	.32	.40
Cases	lb.	.34	.42
*No. 3	lb.	.30	.32
Cocanut, Ceylon, bbls.	lb.	.1834	.1834
*Ceylon, Tanks	lb.	.1734	.1734
Cochin, bbls.	lb.	.1934	.1934
Tanks	lb.	.1834	.1834
Corn, refined, bbls.	lb.	21.47	— 21.67
*Crude, bbls.	lb.	1834	.19
*Cottonseed, Crude, f. o. b. mills	lb.	.1734	.18
*Summer, yellow, prime	lb.	.2034	.2134
*White	lb.	—	—
*Winter, yellow	lb.	—	—
Linseed, raw, car lots	gal.	1.55	— 1.57
5-bbl. lots	gal.	1.56	— 1.58
Boiled, 5-bbl. lots	gal.	1.57	— 1.59
Double Boiled, 5-bbl. lots	gal.	—	—
*Olive, denatured	gal.	1.58	— 1.60
*Peanut, oil, edible	gal.	3.75	— 4.00
*Peanut, oil, f. o. b. mills	gal.	.45	— 48
Pine Oil, white steam	gal.	1.36	— 1.40
Yellow, steam	gal.	—	—
*Poppy Seed	gal.	.54	— 55
*Rapeseed, ref'd.	bbds.	1.75	— 1.80
Blown	gal.	1.85	— 2.00
Rosin, oil, first rect.	gal.	.35	— 40
Second	gal.	.42	— 45
*Sesame, domestic	gal.	3.25	— 3.50
Imported	gal.	—	—
*Nominal	—	—	—

WHERE TO BUY			
<b>Chas. Morningstar &amp; Co., Inc.</b>			
WOOLWORTH BLDG. - BARCLAY-6005-6			
<b>STARCHES</b>			
<b>DEXTRINES</b>			
<b>ALBUMEN</b>			
<b>GLUCOSE</b>			

WE OFFER  
Phthalic  
Anhydride  
*Spot or Contract*Western Reserve Chemical Co.  
3434 EAST 93rd STREET  
CLEVELAND, O.

Hayti	lb.	.1134	.12
Maracaibo	lb.	.22	.24
Trinidad	lb.	.1334	.14

## DEXTRINES AND STARCHES

British Gum, Globe per 100 lbs.	—	6.59
Dextrine, Corn, white or yellow	lb.	.07
Potato, white or canary	lb.	.17
Starch Corn	lb.	.07
Pearl, Globe	lb.	.06
Potato, Domestic	lb.	.13
Imported, duty paid	lb.	.14

## \*REFINED SUGAR

(Prices in Barrels)	Ar. Fed. War.
Powdered	7.60 7.60 7.60 7.60
XXXX	7.65 7.65 7.65 7.65
Confectioners A	7.35 7.35 7.35 7.35
Standard Gran.	7.50 7.50 7.50 7.50
* Prices fixed by Government.	

## Soap Makers' Materials

## ANIMAL AND FISH OILS

*Menhaden, crude, f. o. b. mills, ga.	1.00	— 1.05
Light, strained	gal.	1.16
Yellow, bleached	gal.	1.18
White, bleached, winter	gal.	1.20
Neatsfoot, 20 deg.	gal.	—
30 deg., cold test	gal.	—
40 deg., cold test	gal.	—
Dark	gal.	—
Prime	gal.	—
Red, (Crude oleic acid)	lb.	.17
Saponified	lb.	.17
Stearic, single pressed	lb.	.24
Double pressed	lb.	.25

## VEGETABLE OILS

*Castor, No. 1, bbls.	lb.	.32	— 40
*No. 3	lb.	.30	— 32
Cocanut, Ceylon, bbls.	lb.	.1834	.1834
*Ceylon, tanks	lb.	.1734	.1734
Cochin bbls.	lb.	.1934	.1934
Tanks	lb.	.1834	.1834
*Corn, crude, bbls.	lb.	.1834	.19
Refined, barrels	lb.	.2147	— 21.67
*Cottonseed, crude, f. o. b. mills	lb.	.1734	.18
*Summer Yellow, prime	lb.	.2034	.2134
*White	lb.	—	—
*Winter, Yellow	lb.	—	—
Linseed, raw, car lots	gal.	1.55	— 1.57
5 barrel lots	gal.	1.56	— 1.58
Olive, denatured	gal.	3.75	— 4.00
*Peanuts	lb.	.45	— 48
*Palm, Lagos, casks	lb.	.39	— 40
*Niger	lb.	.29	— 30
*Palm Kernel, domestic	lb.	—	—
Peanut, oil, edible	gal.	1.70	— 1.75
Pine, white steam	gal.	1.36	— 1.40
Sesame, domestic	gal.	3.25	— 3.50
Soya Bean, Manchurian	lb.	.19	— 1.19

## Miscellaneous

## NAVAL STORES

(Carloads ex-dock)

Spirits Turpentine in bbls.	gal.	.45	— .45
Wood Turpentine, steam distilled, bbls.	gal.	.41	— .43
Turpentine, Destructive distilled, bbls.	gal.	.38	— .40
Pitch, prime	200-lb. bbl.	400	— 425
Tar, kiln-burnt, pure 50-gal. bbls.	12.50	— 13.75	
Rosin, com., to g'd	80-bbl.	6.35	— 6.40
D. C.	lb.	.78	— .80
Diamond "I"	lb.	.78	— .90
V. S. O.	lb.	.78	— .79
Fine Orange	lb.	.69	— .73
Second Orange	lb.	.63	— .68
T. N.	lb.	.62	— .63
A. C. Garnet	lb.	.62	— .63
Button	lb.	—	—
Regular, bleached	lb.	.59	— .60
Bone, dry	lb.	.69	— .70
Corn Cake	short ton	37.00	— 40.00
Meal	short ton	41.00	— 42.00
Linseed cake, dom.	short ton	—	52.00
Linseed Meal	short ton	55.00	— 56.00

## SALT PRODUCTS

Salt, fine	280 lb. bbls.	—	— 3.25
	200 lb. sacks	—	— 2.15

Turk's Island—	40 lb. bags	—	— 1.75
<b>COCOA</b>			

Bahia	lb.	.1334	.14
Caracas	lb.	.1334	.14

Nominal.	lb.	—	—
----------	-----	---	---

+Buyers' Tanks.

Tallow, edible	lb.	.1734	.18
City Fancy	lb.	—	.1734
Prime Packers	lb.	.1734	.17
Grease, Choice White	lb.	.1634	.17
"A" White	lb.	.1634	.1634
"B" White	lb.	.1634	.1634
Yellow	lb.	.1534	.1534
Brown	lb.	.12	.1334
Bone	lb.	.1244	.1334
House	lb.	.1534	.1534
Lard	lb.	.19	.1934
Stearine, prime oleo	lb.	.2734	.2734
Nominal.	lb.	—	—

## Imports and Exports of Drugs and Chemicals, Dyestuffs, Etc.

Imports from April 26 to May 4.—Exports for month of March.

Owing to the strict regulations of the Treasury Department forbidding the publication of the names of importers receiving consignments and the names of ports of shipment, this feature of the service is omitted by DRUG AND CHEMICAL MARKETS during the period of the war. Subscribers interested in any special product will be assisted in locating supplies if they will communicate with the Editor.

### Imports

**ACID—**  
52,600 gallons cresylic  
4,300 gallons cresylic  
14,275 pounds cresylic  
2,700 gallons cresylic  
1,250 pounds oxalic  
14,100 pounds oxalic  
**ATROPINE SULPHATE—**  
50 pounds  
**ARSENIC—**  
1,015 pounds  
**BARK—**  
57,029 pounds quinine  
**BEANS—**  
3,600 pounds vanilla  
3,400 pounds vanilla  
8,500 pounds vanilla  
5,620 pounds vanilla  
355 pounds vanilla  
188 pounds vanilla  
**CAMPHOR, CRUDE—**  
35,400 pounds  
**CAMPHOR, REFINED—**  
1,000 pounds  
**CHEMICAL PREP.—**  
1,000 pounds  
750 pounds  
**DYES AND DYE STUFFS—**  
4,900 pounds orchil liquor  
40,800 pounds gambier  
**ESSENTIAL OILS—**  
150 pounds various  
650 pounds various  
3,600 pounds various  
2,750 pounds various  
2,950 pounds various  
5,500 pounds various  
150 pounds rose  
1,250 pounds lavender  
1,350 pounds geranium  
750 pounds jasmine  
800 pounds kananga  
**GELATIN—**  
10,811 pounds  
6,048 pounds  
**GUATACOL—**  
1,000 pounds

**GUMS—**  
88,300 pounds arabic  
11,000 pounds arabic  
130,300 pounds arabic  
2,800 pounds tragacanth  
4,700 pounds guayacan  
261,700 pounds chicle  
40,632 pounds chicle  
33,232 pounds chicle  
**INDIGO—**  
7,000 pounds natural indigo  
**IODINE, CRUDE—**  
7,437 pounds  
**LACTARENE—**  
176,368 pounds  
**LEAVES—**  
7,200 pounds senna  
17,600 pounds sage  
7,400 pounds laurel  
12,000 pounds laurel  
2,500 pounds belladonna  
550 pounds horehound  
**LEECHES—**  
200 pounds blood suckers  
**LIME, CITRATED—**  
29,235 pounds  
**MEDICINAL AND MISCELLANEOUS DRUG PREP.—**  
600 pounds drugs  
2,500 pounds medicine  
**MERCURY—**  
7,000 pounds oxide  
**NAPHTHALENE—**  
22,500 pounds flake  
**OILS—**  
20,000 gallons castor  
19,459 gallon Chinese nut  
48,878 pounds coco nut  
2,235 pounds coco nut  
24,600 pounds cotton seed  
3,918 pounds palm  
60 pounds soya bean  
120,000 pounds soya bean  
7,920 pounds fusel  
42,132 pounds fusel  
4,906 gallons peanut  
3,578 gallons olive edible  
**OPIUM—**  
4,088 pounds  
**POTASSIUM CARBONATE—**  
275,300 pounds  
119,150 pounds

**POTASSIUM SULPHATE—**  
2 tons  
**QUEBRACHO—**  
5,081,000 pounds  
507 pounds  
**QUININE SULPHATE—**  
3,700 ounces  
1,760 ounces  
**ROOTS—**  
4,600 pounds doggrass  
14,000 pounds orris  
11,200 pounds various  
1,600 pounds licorice  
12,400 pounds gentian  
4,080 pounds dandelion  
1,300 pounds colchicum  
6,075 pounds belladonna  
72 pounds ginger  
120 pounds ginger  
29,486 pounds ginger  
**SEED—**  
9,750 pounds caraway  
4,000 pounds caraway  
4,850 pounds coriander  
**SPICES—**  
22,444 pounds cassia  
225 pounds cassia  
93,334 pounds cassia  
**SPONGES—**  
2,500 pounds  
**SUMAC—**  
287,000 pounds  
10,850 pounds  
82,070 pounds  
**TALC—**  
1,000 pounds prepared  
30,703 pounds ground  
**TARTAR CRUDE—**  
48,070 pounds  
32,600 pounds  
**WINE LEES—**  
199,916 pounds  
15,051 pounds

**Exports**

**ACID, CARBOLIC—**  
20 pounds, Guatemala  
283,266 pounds, France  
**ACID, NITRIC—**  
35 pounds, Honduras  
142 pounds, Panama  
**ACID, PICRIC—**  
9,132,433 pounds, France  
**ACID SULPHURIC—**  
255 pounds, Nicaragua  
740 pounds, Panama  
50 pounds, Bermuda  
**ALCOHOL—**  
72,117 gallons, France

### TURN TO U. S. FOR MANUFACTURES

American merchandise is forming a greatly increased share in the imports of all the grand divisions of the world, and of most of the countries outside of the Central Powers of Europe. Not only have our Allies in Europe trebled their purchases from the United States but the neutral sections of the world, whose chief imports are manufactures, have been compelled to call upon the United States to supply the merchandise which they were formerly accustomed to obtain from the factories of Europe. A compilation by The National City Bank of New York shows that merchandise from the United States now forms a much larger percentage of the imports of all the grand divisions than prior to the war, while in the case of South America, our share of the imports in 1917 was actually three times as great as in 1913 and four times as great as in 1910.

Manufactures were formerly the chief exports of the now belligerent countries of Europe and manufactures are the chief imports of all the neutral countries of the world. When the manufacturing countries

of Europe found it necessary to turn their factories into producers of war material their power to supply manufactures to the non-manufacturing world was greatly reduced. The Bank's figures show that manufactures normally form more than 75% of the imports of South America, Asia, Africa and Oceania, and that in all those sections of the world merchandise from the United States is now forming a larger percentage of imports than when they were able to draw their supplies of manufactures from the factories of Europe.

The total value of domestic manufactures exported from the United States in the calendar year 1914 was less than \$1,000,000,000 and in the calendar year 1917 was over \$4,000,000,000. Exports of domestic manufactures from the United States, including in this figure the two groups "manufactures for manufacturing" and "manufactures ready for use" aggregated in the calendar year 1914 \$973,994,000 and in 1917 \$4,018,000,000 and while much of this increase went to Europe in the form of war munitions there were also large increases in other classes of manufactures exported.

## Vegetable Ivory Trade

An appeal for domination by New York of the world's vegetable ivory, or tagua nut, trade is presented in the following paragraph of a letter received by The Merchants' Association from George D. Hedian, American Consular Agent at Esmeraldas, Ecuador:

"There is, however, another business which I have long desired to see secured by New York, that is the control of the trade in the tagua nut, that is, vegetable ivory, up to the time of the breaking out of the war controlled by Hamburg. The present is a most favorable time to tie up this important trade. This nut is the principal material used in the manufacture of buttons and this district furnishes the highest grade article in the world.

"Several years ago I had some correspondence with a Mr. —, who told me that he represented parties who were interested in this business and I outlined a plan for him by which New York could be made the distributing center for the world, but he was at the time interested in a Peruvian railroad concession and did not take up the tagua matter. This business should be finished, or secured before the end of the war, when the European market will again be open and the German manufacturers and commissionists again make Hamburg the centre of distribution. If this interests you, call it to the attention of The Association as a business worth going after for New York."

### OILS AND CHEMICALS FOR NORWAY

Washington, D. C. May 8.—The exportation of 5,000 tons of tanning extracts, 4,000 tons of resin, 76,500 tons of mineral oils, 10,000 tons of vegetable oils and fats, 20,000 tons of oil seeds, and chemicals, drugs, dyes and medicines as needed, is provided for in a commercial agreement just signed by representatives of the Norwegian and United States Governments.

The agreement assures to Norway supplies sufficient to cover her estimated needs, in so far as these can be supplied without detriment to the war needs of this country and her associates, and contains long schedules enumerating the quantities of various commodities which Norway is entitled to receive.

On the other hand, Norway agrees to permit the unhampered export to the United States and its associates in the war of all Norwegian products not needed for home consumption, particularly of ores and minerals, chemical and metallurgical products, etc. This covers the regular supply of nitrates and other exports, particularly for the European associates of the United States in the war, our own requirements in the way of imports from Norway being relatively small.

### GOVERNMENT TO USE SEIZED NARCOTICS

The House Ways and Means Committee has favorably reported the bill authorizing the Government to dispose of coca leaves, their salts and derivatives, or compounds, or opium except smoking opium, in any manner whatever when seized for a violation of law. At the present time the Government has about \$100,000 worth of seized narcotics in its possession and desires authority to deliver this amount and any hereafter seized to any department or agency of the Government for medicinal or scientific purposes.

### LIBERTY LOAN SUBSCRIPTIONS \$29,089,500

With an increase of nearly \$10,000,000 in the last week of the campaign, the total of subscriptions to the Third Liberty Loan by the drug and chemical trade in the New York district amounted to \$29,089,500.

# Want Ads

RATE—Our charge for these *WANT ADS* in this publication, *all classifications*, is \$1.00 an issue for 20 words or less; additional words, 5c each.

PAYMENT in all cases should accompany the order; add 10c if answers are to be forwarded.

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## Drugs and Chemicals

### Headquarters for

Acetone	
Amyl Acetate	
Barium Peroxide 88-92%	
Barium Chloride	Cod Liver Oil
Barium Nitrate	Gum Tragacanth
Blanc Fixe	Mineral Oil
Citric, Cresylic Acids	Myrrhane Oil
Stearic, Tartaric Acids	Olive Oil
Carbon Tetrachloride	Spermaceti
Formaldehyde	Japan Wax
Gum Arabic	Certified Food Colors
Japanese Camphor	Essential Oils
Menthol	Powdered Rice Starch
Calomel Howard's English	
Chalk, English Precipitated	
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